



SERVICE MANUAL



DPM 4000

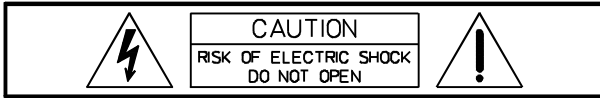
Table of Contents

- Safety and Service Instructions
-
- Warranty
-
- Measuring data
-
- Bill of materials
-
- Spare parts plan
-
- Circuit diagrams

TELEX / EVI Audio GmbH
- Service Department -
Hirschberger Ring 45
94315 Straubing

Tel.: ++49-9421/706-342
Fax.: ++49-9421/706-350
e-mail: josef.stadler@telex.de

IMPORTANT SAFETY INSTRUCTIONS



WARNING: TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK,
DO NOT EXPOSE THIS APPLIANCE TO RAIN OR MOISTURE.
AVIS: RISQUÉ DE CHOC ELECTRIQUE. NE PAS OUVRIR.



The lightning flash with arrowhead symbol, within an equilateral triangle is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.



The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

1. Read these instructions.
2. Keep these instructions.
3. Heed all warnings.
4. Follow all instructions.
5. Do not use this apparatus near water.
6. Clean only with a damp cloth.
7. Do not block any of the ventilation openings.
Install in accordance with the manufactures instructions.
8. Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus that produce heat.
9. Only use attachments/accessories specified by the manufacturer.
10. Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as power-supply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.

For US and CANADA only:

Do not defeat the safety purpose of the grounding-type plug. A grounding type plug has two blades and a third grounding prong. The wide blade or the third prong are provided for your safety. When the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.

IMPORTANT SERVICE INSTRUCTIONS

CAUTION: These servicing instructions are for use by qualified personnel only. To reduce the risk of electric shock, do not perform any servicing other than that contained in the Operating Instructions unless you are qualified to do so. Refer all servicing to qualified service personnel.

1. Security regulations as stated in the EN 60065 (VDE 0860 / IEC 65) and the CSA E65 - 94 have to be obeyed when servicing the appliance.
2. Use of a mains separator transformer is mandatory during maintenance while the appliance is opened, needs to be operated and is connected to the mains
3. Switch off the power before retrofitting any extensions, changing the mains voltage or the output voltage.
4. The minimum distance between parts carrying mains voltage and any accessible metal piece (metal enclosure), respectively between the mains poles has to be **3 mm** and needs to be minded at all times.
The minimum distance between parts carrying mains voltage and any switches or breakers that are not connected to the mains (secondary parts) has to be **6 mm** and needs to be minded at all times.
5. Replacing special components that are marked in the circuit diagram using the security symbol (Note) is only permissible when using original parts.
6. Altering the circuitry without prior consent or advice is not legitimate.
7. Any work security regulations that are applicable at the location where the appliance is being serviced have to be strictly obeyed. This applies also to any regulations about the work place itself.
8. All instructions concerning the handling of **MOS** - circuits have to be observed.

Note:  **SAFETY COMPONENT (HAS TO BE REPLACED WITH ORIGINAL PART ONLY)**

GARANTIE

Das Werk leistet Garantie für alle nachweisbaren Material- und Fertigungsfehler für die Dauer von 36 Monaten ab Verkauf.

Garantieleistungen werden nur dann anerkannt, wenn gültige, d.h. vollständig ausgefüllte Garantieunterlagen vorliegen.

Von der Garantie ausgenommen sind alle Schäden, die durch falsche oder unsachgemäße Bedienung verursacht werden. Bei Fremdeingriffen oder eigenmächtigen Änderungen erlischt jeder Garantieanspruch.

WARRANTY

The manufacturer's warranty covers all substantial defects in materials and workmanship for a period of 36 months from the date of purchase.

Liability claims are accepted solely, when a valid – correctly and completely filled out – Warranty Registration form is presented by the original owner of the product. The warranty does not cover damage that results from improper or inadequate treatment or maintenance. In case of alteration or unauthorized repairs, the warranty is automatically terminated.

GARANTIE

La garantie constructeur couvre tous les défauts matériels et de main d'œuvre pour une période de 36 mois à compter de la date d'achat. La garantie ne sera reconnue que si la Carte de Garantie, correctement et complètement remplie, est présentée par l'acheteur d'origine du produit. Les dommages dus à un mauvais maniement de l'appareil, à un traitement ou une maintenance incorrects ou inadéquats ne sont pas garantis. Toute modification ou intervention effectuée par une personne non qualifiée entraîne la résiliation automatique de la garantie.



GmbH • Hirschberger Ring 45 • 94315 Straubing • Telefon (09421) 706-0 • Telefax (09421) 706-265

Änderungen vorbehalten. Subject to change without prior notice. Printed in Germany 07. 07. 1999 /

Internet: [http:// www.dynacord.de](http://www.dynacord.de)

Technical Specifications and Measured Data DPM 4000

NRS 90215 - 2 Ch. paging console input 81332	
EDP No.	121 665
Editor	Kaup
Creation Date	06.05.98

1. Operation Voltage [1]

1.1 Nominal Operation Voltage

U_{A+}	CN3 pin 1a	+12 V $\pm$ 10 %
U_{A-}	CN3 pin 1b	-12 V $\pm$ 10 %
U_{D+}	CN3 pin 4a, 4b	+5 V $\pm$ 5 %
U_{B1}	CN3 pin 16b	+24 V

1.2 Nominal Operation Range of U_{B1} +21.6 V ... +31.2 V

2. Operation Current [1]

at Nominal Operation Voltages

I_{A+}		87 mA $\pm$ 10 %
I_{A-}		17 mA $\pm$ 10 %
I_{D+}		60 mA $\pm$ 10 %
I_{B1}	inputs open	16 mA $\pm$ 10 %

3. Audio Inputs

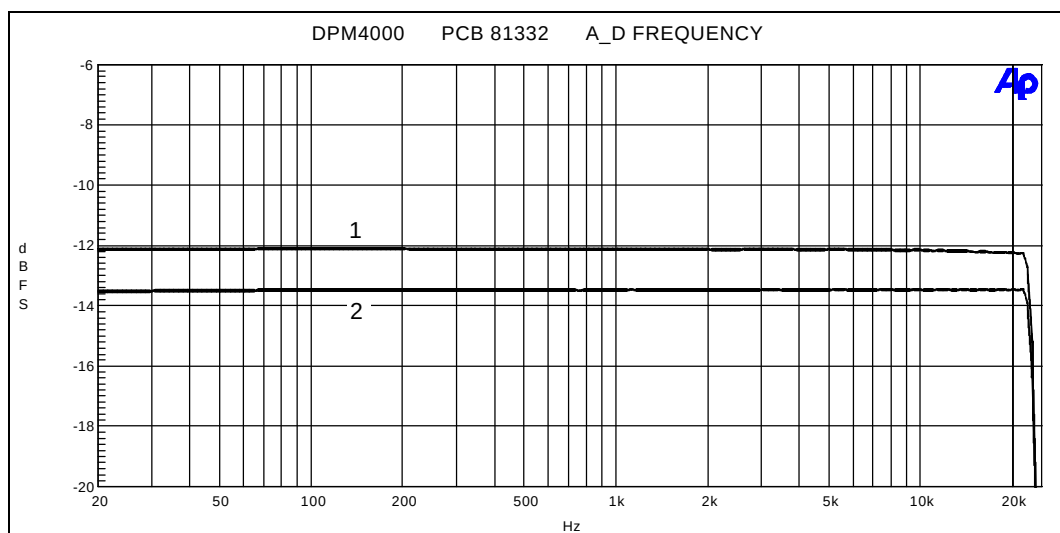
3.1	Connections	2 x RJ45, 8-pole
3.2	Input Impedance, balanced	20 k Ω
3.3	Nominal Input Level	0 dBu / 775 mV
3.4	Max. Input Level	+12 dBu / 3 V
3.5	Input Balancing	$\geq$ -30 dB

3.6 Frequency Response [2]

Frequency Response

20 Hz ... 20 kHz

$\pm 0.5\text{dB}$



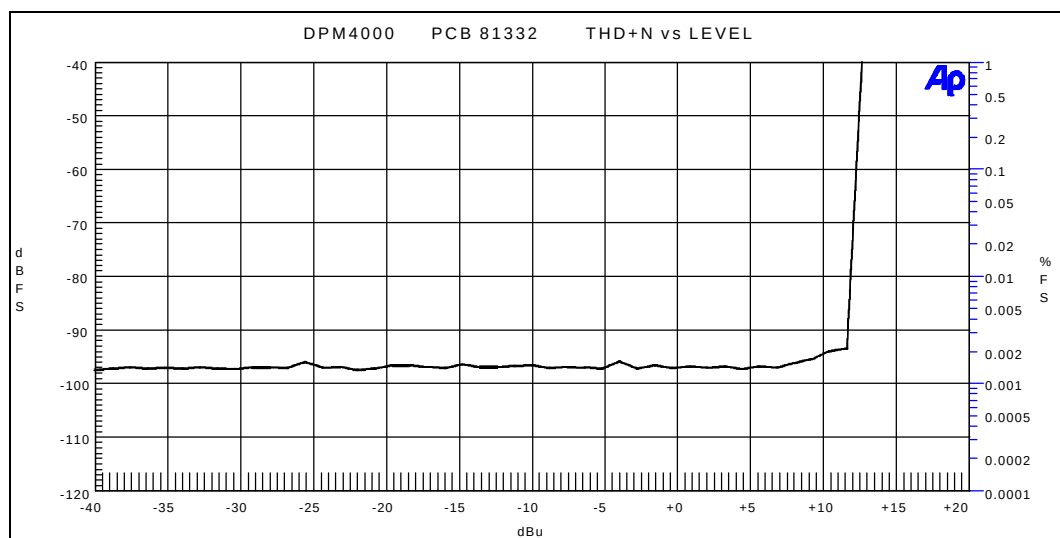
Digital Input Level (dBFS) as a function of the frequency (Hz), input level = 0 dBu

- 1 without input transformer
- 2 with NRS 90208, Line input transformer

3.7 Distortion [2] [3]

3.7.1 THD+N relative to the level 0 dBu

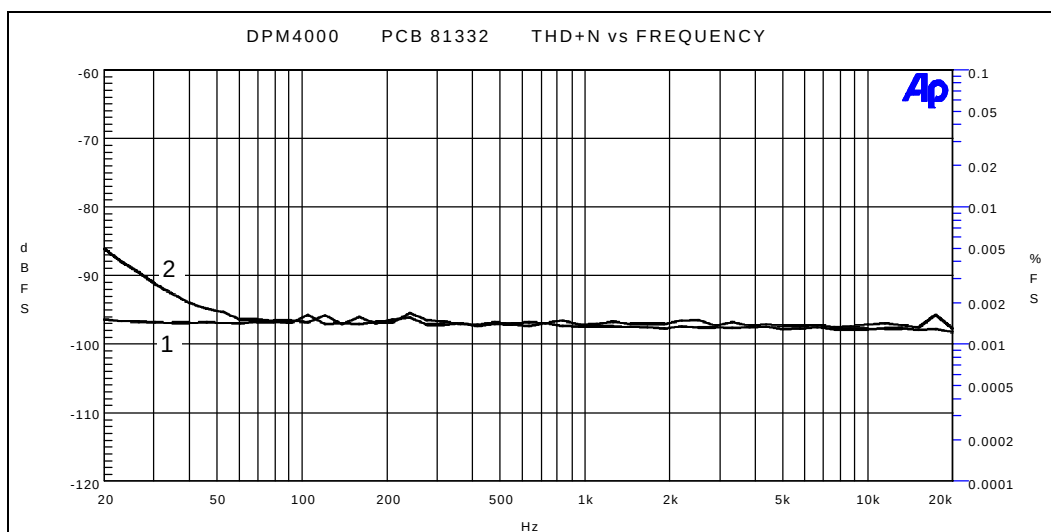
$\leq -80\text{ dB} = 0.01\%$



Distortion (THD+N absolute) as a function of the input level (dBu), measured at 1 kHz

3.7.2 THD+N relative to the frequency

20 Hz ... 20 kHz, 0 dBu ≤ -80 dB = 0.01 %



Distortion (THD+N absolute) as a function of the frequency (Hz),
measured at 0 dBu input level

- 1 without transformer
- 2 with NRS 90208, Line input transformer

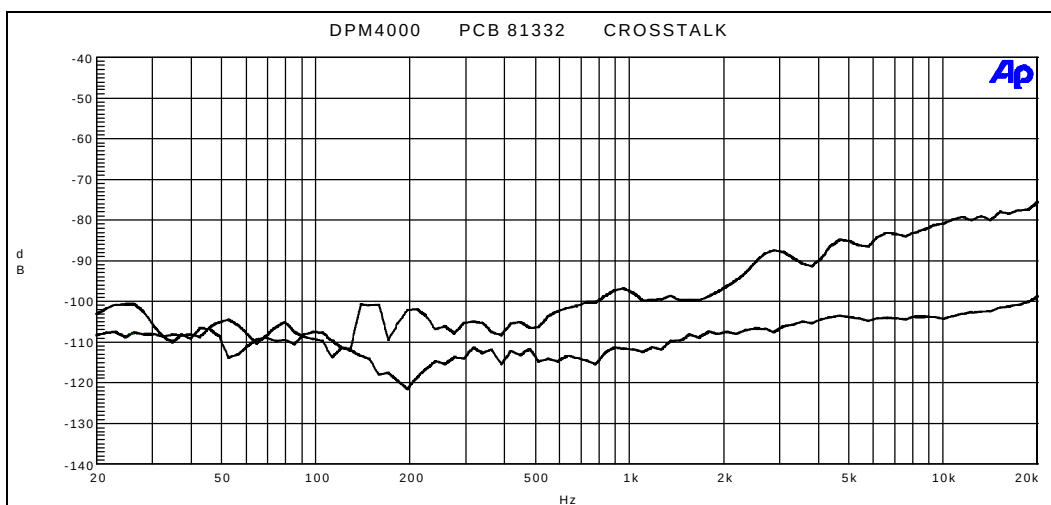
3.8 Interference Voltages [2]

Inputs terminated with 50 Ω

unweighted	≤ -96 dBFS
A-weighted	≤ -100 dBFS
CCIR-468	≤ -86 dBFS

3.9 Crosstalk Attenuation [2]

Crosstalk 1 kHz ≤ -80 dB



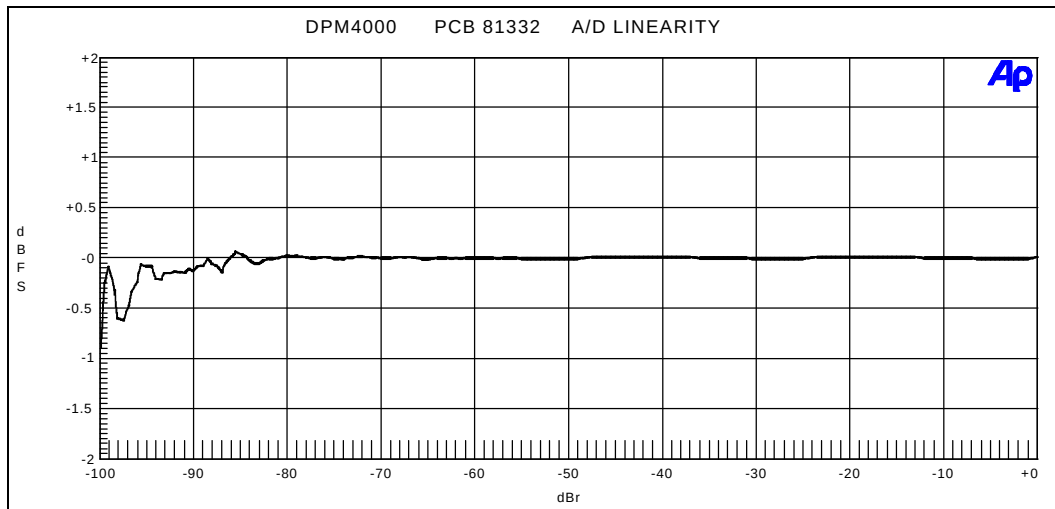
Crosstalk Attenuation (dB) as a function of the frequency (Hz),
measured at 0 dBu input level

3.10 Converter Linearity [2]

Deviation in Linearity

0 ... -80 dB

< ± 0.5 dB



Digital input level (dBFS) as a function of the analog input level (dBr),
measured at 1 kHz, 0 dBr = 0 dBFS

3.11 General Data

3.11.1	Dynamic [2]	A-weighted	> 100 dB
3.11.2	S/N Ratio [2]	A-weighted	> 100 dB
3.11.3	Sampling Rate		48 kHz
3.11.4	Data Format		18 Bit linear
3.11.5	Delay	0.52 ms	
3.11.6	Operation Temperature Range		+5 ... +40 °C

4. Control Interfaces

at CN1, CN2 pins 4 and 5

RS485 Standard

5. Power Supply for the DPC 4000 [1] [3]

at CN1, CN2, pins 1 and 2

5.1	Nominal Output Voltage	24 V DC -10% +30%
5.2	Output Current	adjustable 330 mA, 660 mA, 990 mA
	Electronically programmable fuses against overload and short-circuit	
5.3	Power-Off at Undervoltage	if $U_{B1} < +17$ V - 10%

6. Size and Weight

6.1	Dimensions W x H x D	37.5 x 81 x 248 mm
6.2	Weight without NRS	152 g
6.3	Weight including 2 x NRS 90208	220 g

7. Extensions

7.1	NRS 90208	Line Input Transformer	order No. 121 641
-----	-----------	------------------------	-------------------

8. General

8.1 Measurement Remarks

- All measurement at room temperature – unless otherwise specified, without input transformer
- All level values stated ± 1 dB

[1] measured using the Philips Digital multi-meter PM2517X

[2] measured using the Audio Precision System One and Serial Interface Adapter SIA-322 via Input Service Board 83108

[3] Output current adjusted via parser-command ' Fuse '

Technical Specifications and Measured Data DPM 4000

NRS 90216 - Mic/Line + 2 Aux Input 81335	
EDP No.	121 666
Editor	Kaup
Creation Date	29.04.98

1. Operation Voltage [1]

1.1 Nominal Operation Voltages

U_{A+}	CN1 pin 1a	+12 V $\pm$ 10 %
U_{A-}	CN1 pin 1b	-12 V $\pm$ 10 %
U_{D+}	CN1 pin 4a, 4b	+5 V $\pm$ 5 %

2. Operation Current [1]

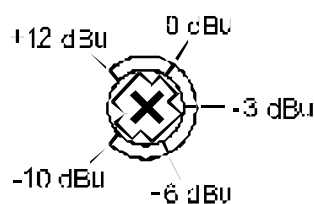
at Nominal Operation Voltages

I_{A+}	CN1 pin 1a	110 mA $\pm$ 10 %
I_{A-}	CN1 pin 1b	35 mA $\pm$ 10 %
I_{D+}	CN1 pin 4a, 4b	4 mA $\pm$ 10 %

3. Inputs

3.1 AUX -Inputs

3.1.1	Connections	2 x 2 RCA-type, unbalanced
3.1.2	Input Impedance	10 k Ω
3.1.3	Nominal Input Level	-10 ... +12 dBu / 250 mV ... 3 V
3.1.4	Max. Input Level	+12 dBu / 3 V
3.1.5	Level Matching	VR2, VR3



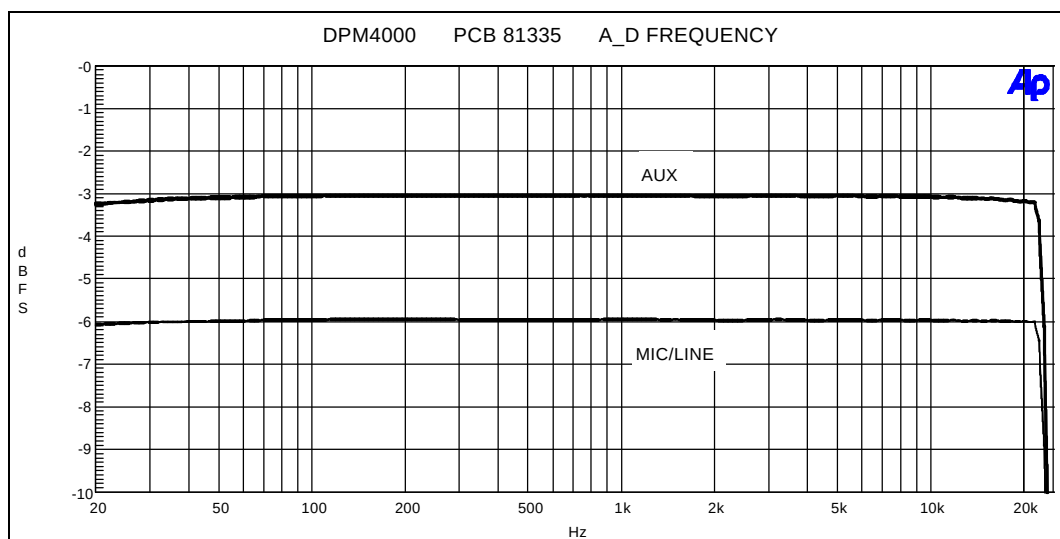
3.2 Mic / Line Input

3.2.1	Connections	1 x XLR-type connector electronically balanced, transformer optional
3.2.2	Input Impedance Mic Line	3,6 k Ω 10 k Ω
3.2.3	Nominal Input Level	Mic -54 ... -14 dBu / 1.5 ... 155 mV Line -24 ... +16 dBu / 50 mV ... 5 V
3.2.4	Max. Input Level	

	Linear Operation	
	Mic	-14 dBu / 155 mV
	Line	+16 dBu / 5 V
	Compressor/Limiter Operation	
	Mic	+5 dBu / 1.4 V
	Line	+30 dBu / 25 V
3.2.5	Input Balancing	≥ -30 dB
3.2.6	Phantom Power	switched via jumpers
3.2.7	Input Transformer Attenuation	+24 V / max. 20 mA 1.5 dB

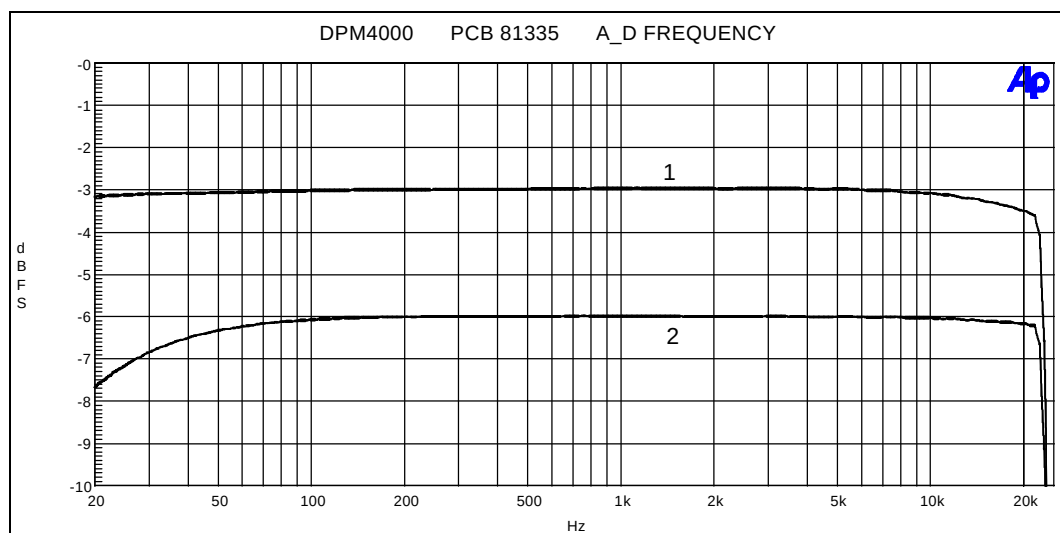
3.3 Frequency Response [2] [3]

3.3.1 linear Frequency Response 20 Hz ... 20 kHz ± 0.5 dB



Input level (dBFS) as a function of the frequency (Hz), JP2 set to 'LIN'

3.3.2 Frequency Response Mic/Line Input
with NRS 90233 input transformer 20 Hz ... 20 kHz + 0.5 / - 1 dB
Compressor/Limiter ON 20 Hz ... 20 kHz + 0.5 / - 2 dB



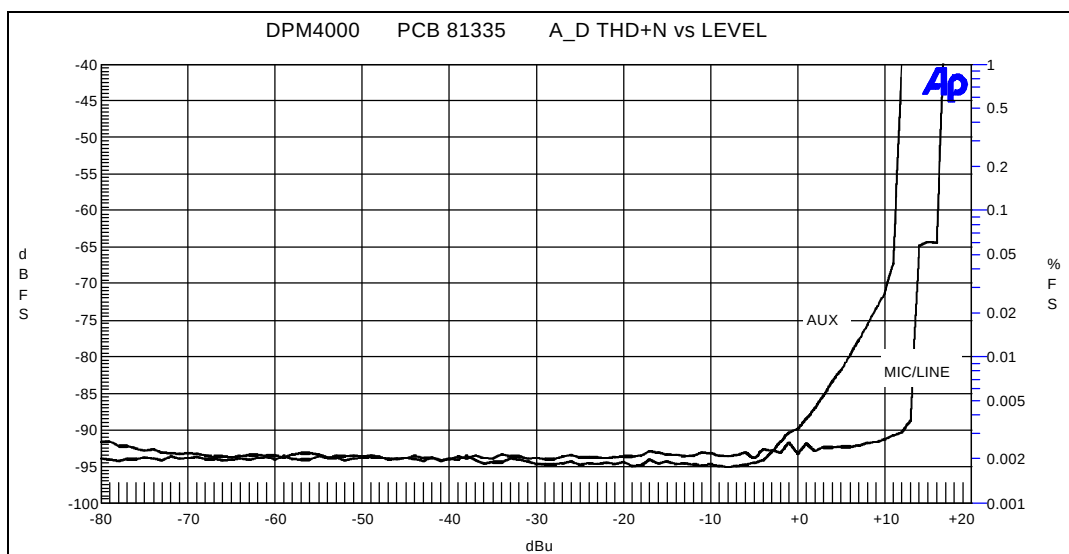
Input level (dBFS) as a function of the frequency (Hz)

- 1 with NRS 90233 Mic/Line input transformer
- 2 Compressor/Limiter ON, JP2 set to 'COMP', input level +20 dBu

3.4 Distortion [2] [3]

3.4.1 THD+N relative to the level 0 dBu

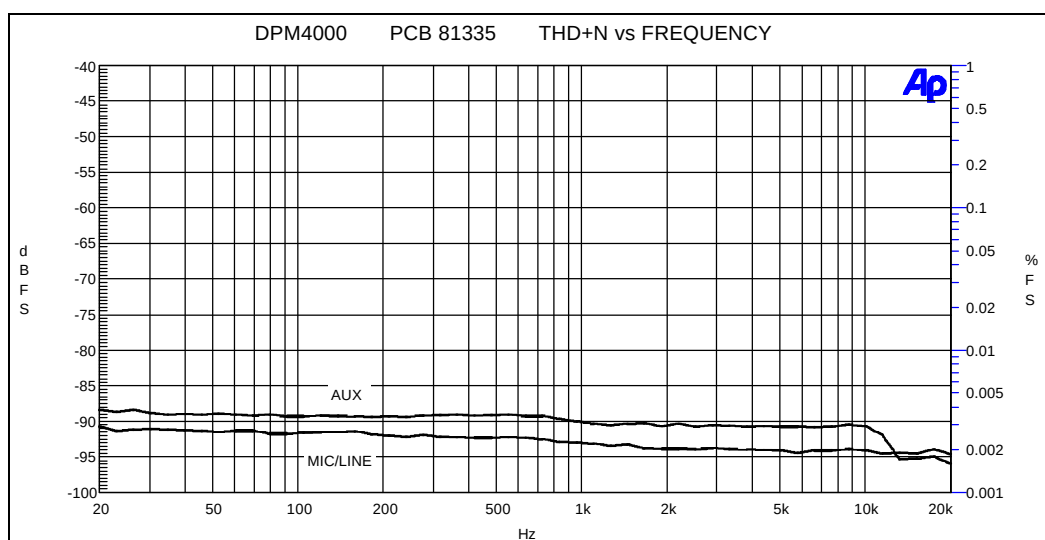
$\leq -80 \text{ dB} = 0.01 \%$



Distortion (THD+N absolute) as a function of the input level (dBu), measured at 1 kHz

3.4.2 THD+N relative to the frequency

20 Hz ... 20 kHz, 0 dBu $\leq -80 \text{ dB} = 0.01 \%$



Distortion (THD+N absolute) as a function of the frequency (Hz), measured at 0 dBu input level

3.4.3 THD+N relative to the frequency Mic/Line Input

1 kHz, at 0 dBu input level

Linear, without input transformer

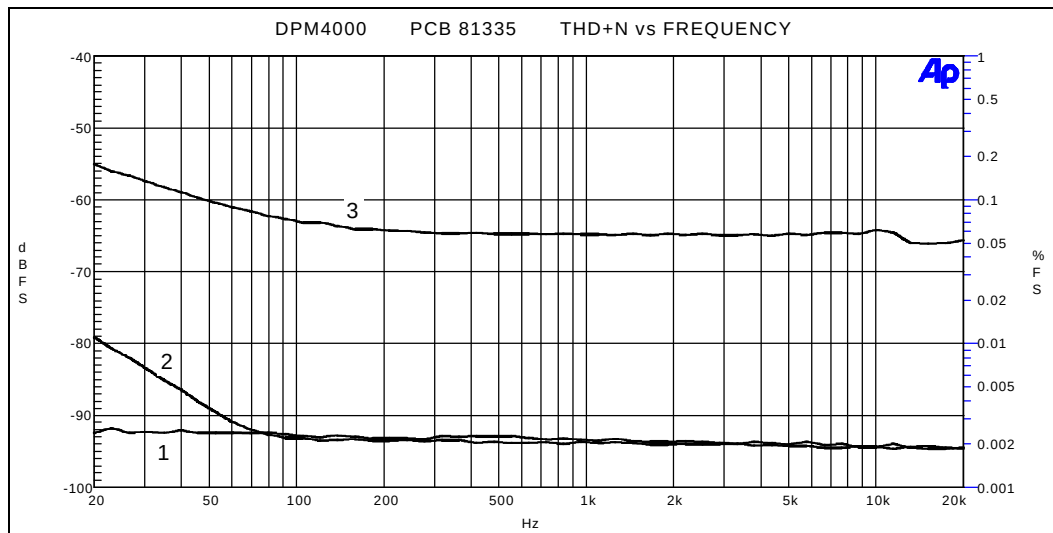
≤ -80 dB = 0.01 %

With NRS 90233, Mic/Line Input Transformer

≤ -80 dB = 0.01 %

With Compressor/Limiter

≤ -60 dB = 0.1 %



Distortion (THD+N absolute) as a function of the frequency (Hz),
measured at 0 dBu input level

1 linear, without input transformer

2 with NRS 90233, Mic/Line input transformer

3 Compressor/Limiter ON, JP2 set to 'COMP'

3.5 Interference Voltages [2] [3]

Inputs terminated with 50 Ω

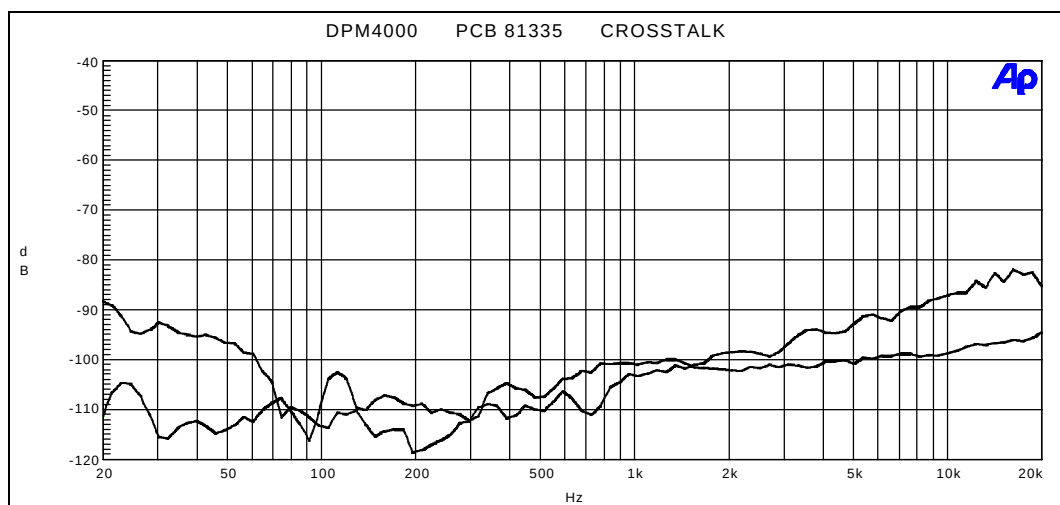
3.5.1	AUX Input	unweighted	≤ -96 dBFS
		A-weighted	≤ -100 dBFS
		CCIR-468	≤ -86 dBFS
3.5.2	Mic/Line Input	unweighted	≤ -92 dBFS
		A-weighted	≤ -95 dBFS
		CCIR-468	≤ -83 dBFS
3.5.3	Mic/Line Input, Compressor/Limiter ON (JP2 set to 'COMP')	unweighted	≤ -75 dBFS
		A-weighted	≤ -78 dBFS
		CCIR-468	≤ -65 dBFS

3.6 Crosstalk Attenuation [2] [3]

Crosstalk

1 kHz

≤ -80 dB



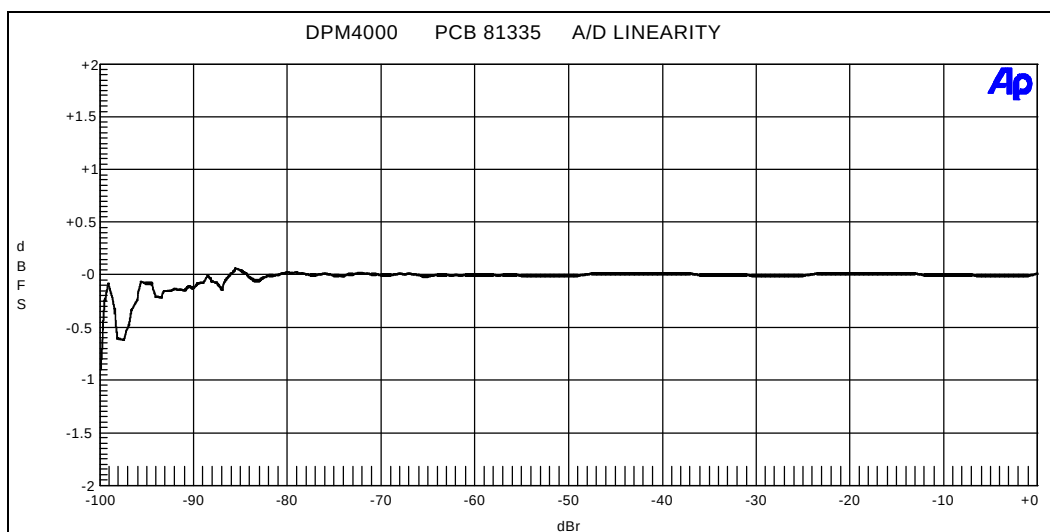
Crosstalk Attenuation (dB) as a function of the frequency (Hz), measured at 0 dBu

3.7 Converter Linearity [2]

Deviation in Linearity

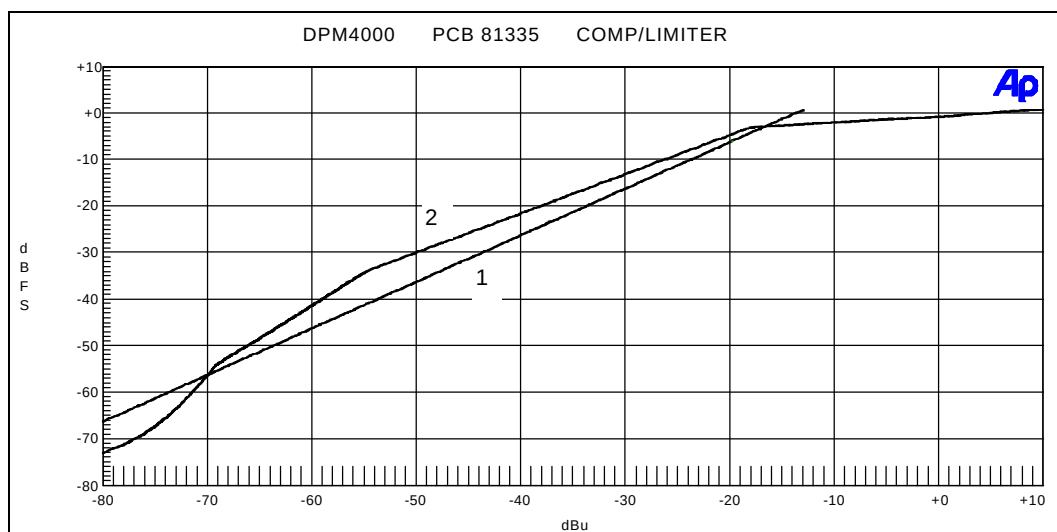
0 ... -80 dB

$< \pm 0.5$ dB



Digital input level (dBFS) as a function of the input level (dBr), measured at 1 kHz,
0 dBr = 0 dBFS

3.8 Compressor/Limiter [2]



Digital input level (dBFS) as a function of the input level (dBu), measured at 1 kHz,
S1 set to 'MIC', controls at counterclockwise margin

1 JP2 set to 'LIN', linear

2 JP2 set to 'COMP', Compressor/Limiter ON

3.9 General Data

3.9.1	Dynamic [2] [3]	A-weighted	> 95 dB
3.9.2	S/N Ratio [2] [3]	A-weighted	> 95 dB
3.9.3	Sampling Rate		48 kHz
3.9.4	Data Format		18 Bit linear
3.9.5	Delay	0.52 ms	
3.9.6	Operation Temperature Range		+5 ... +40 °C

4. Size and Weight

4.1	Dimensions W x H x D	37.5 x 81 x 252 mm
4.2	Weight without NRS	160 g
4.3	Weight including NRS 90233	173 g

5. Extensions

5.1	NRS 90233	Mic/Line Input Transformer	order No. 121 682
-----	-----------	----------------------------	-------------------

6. General

6.1 Measurement Remarks

- All measurement at room temperature – unless otherwise specified, without Compressor/Limiter (JP2 set to 'LIN'), without input transformer
- All level values stated ± 1 dB

- [1] measured using the Philips Digital multi-meter PM2517X
- [2] measured using the Audio Precision System One and Serial Interface Adapter SIA-322 via Input Service Board 83108
- [3] Mic/Line switch set to 'Line', all controls set to their counterclockwise margin

Technical Specifications and Measured Data DPM 4000

NRS 90217 2 Channel Mic/Line Input 81337	
EDP No.	121 667
EDP No. measured data	813378
Editor	Wendler
Creation date	03.09.98

1. Operation Voltage [1]

1.1 Nominal Operation Voltage

U_{A+}	CN1 pin 1a	+12 V $\pm$ 10 %
U_{A-}	CN1 pin 1b	-12 V $\pm$ 10 %
U_{D+}	CN1 pin 4a, 4b	+5 V $\pm$ 5 %

2. Operation Current [1]

at Nominal Operation Voltage

I_{A+}	CN1 pin 1a	118 mA $\pm$ 10 %
I_{A-}	CN1 pin 1b	38 mA $\pm$ 10 %
I_{D+}	CN1 pin 4a, 4b	5 mA $\pm$ 10 %

3. Inputs

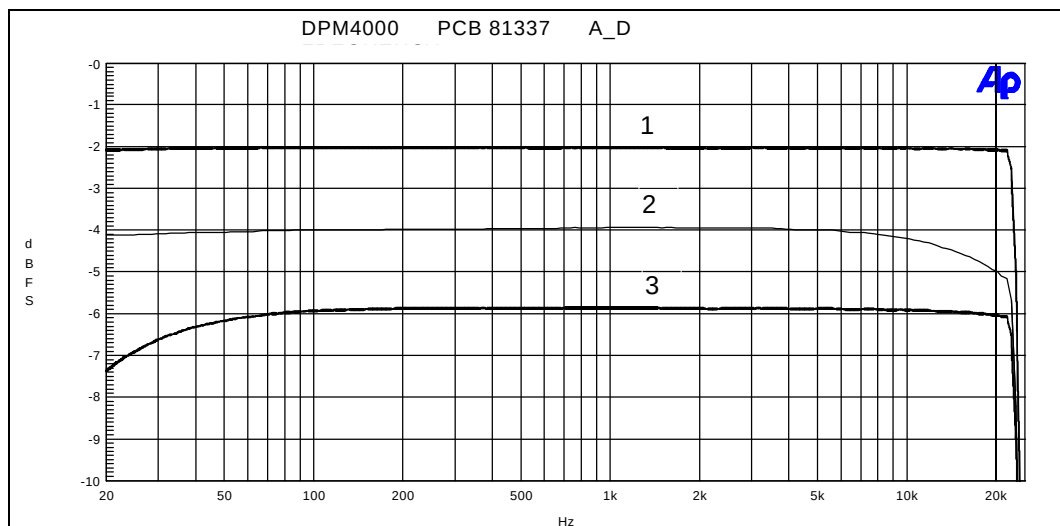
3.1 Mic / Line Input

3.1.1	Connections	2 x XLRF-type connector, electronically balanced, transformer optional	
3.1.2	Input Impedance Mic	3.6 k Ω	
	Line	10 k Ω	
3.1.3	Nominal Input Level	Mic	-54 ... -14 dBu / 1.5 ... 155 mV
		Line	-24 ... +16 dBu / 50 mV ... 5 V
3.1.4	Max. Input Level	Linear Operation	
		Mic	-14 dBu / 155 mV
		Line	+16 dBu / 5 V
		Compressor/Limiter Operation	
		Mic	+5 dBu / 1,4 V
		Line	+30 dBu / 25 V
3.1.5	Input Balancing	$\geq$ -30 dB	
3.1.6	Phantom Power	switched via jumpers	+24 V / max. 20 mA

3.3 Frequency Response [2], [3]

3.3.1 Frequency Response MIC/LINE Input

Frequency Response, linear	20 Hz ... 20 kHz	$\pm 0.5\text{dB}$
with NRS 90233 Input Transformer	20 Hz ... 20 kHz	+ 0.5 / - 1 dB
Compressor/Limiter ON	20 Hz ... 20 kHz	+ 0.5 / - 2 dB



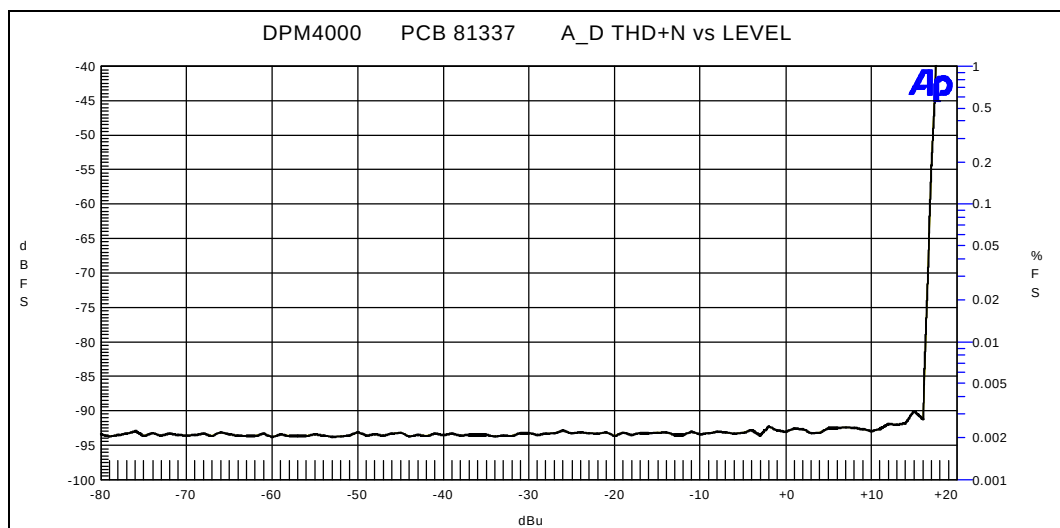
Input level (dBFS) as a function of the frequency (Hz) , input level = 0 dBu

- 1 Compressor/Limiter OFF, JP3 and JP4 set to 'LIN'
- 2 with NRS 90233 input transformer Mic/Line
- 3 Compressor/Limiter ON, JP3 and JP4 set to 'COMP'

3.4 Distortion

3.4.1 Distortion MIC/LINE Input [2],[3]

3.4.1.1 THD+N relative to the level 0 dBu $\leq -80\text{ dB} = 0.01\%$



Distortion (THD+N absolute) as a function of the input level (dBu), measured at 1 kHz

3.4.1.2 THD+N relative to the frequency

1 kHz, at 0 dBu input level

Linear, without input transformer

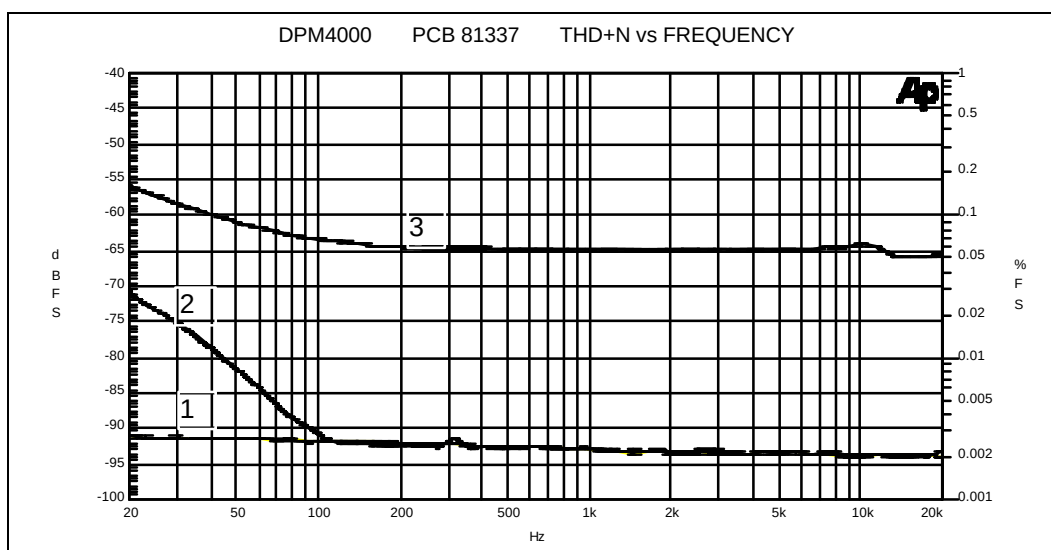
≤ -80 dB = 0.01 %

with NRS 90233, input transformer Mic/Line

≤ -80 dB = 0.01 %

with Compressor/Limiter

≤ -60 dB = 0.1 %



Distortion (THD+N absolute) as a function of the frequency (Hz),

1 Linear, without input transformer

2 with NRS 90233, input transformer Mic/Line

3 Compressor/Limiter ON, JP3 and JP4 set to 'COMP'

3.5 Interference Voltages [2], [3]

Inputs terminated with 50 Ω

3.5.1 Mic/Line Input

unweighted

≤ -92 dBFS

A-weighted

≤ -95 dBFS

CCIR-468

≤ -83 dBFS

3.5.2 Mic/Line Input, Compressor/Limiter ON (JP3 and JP4 set to 'COMP')

unweighted

≤ -75 dBFS

A-weighted

≤ -78 dBFS

CCIR-468

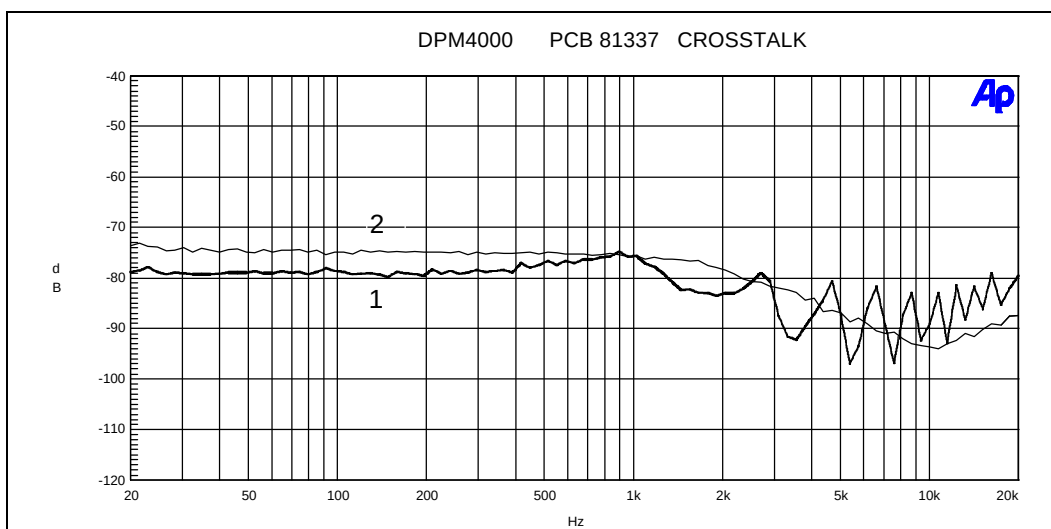
≤ -65 dBFS

3.6 Crosstalk Attenuation [2], [3]

Crosstalk

1 kHz

≤ -80 dB



Crosstalk Attenuation (dB) as a function of the frequency (Hz), measured at 0 dBu

1 Input signal at the MIC/LINE input A (measured at input B)

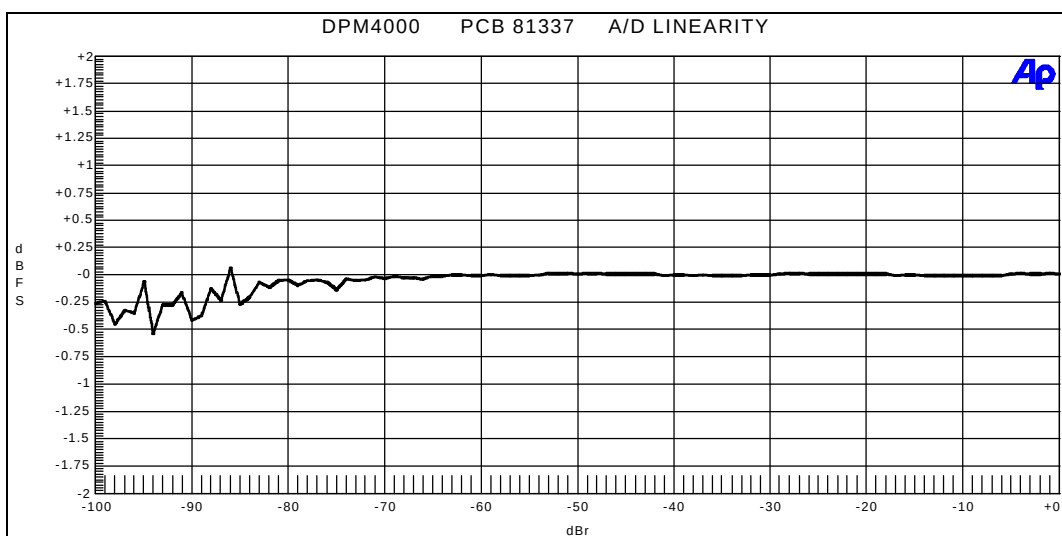
2 Input signal at the MIC/LINE input B (measured at input A)

3.7 Converter Linearity [2]

Deviation in Linearity

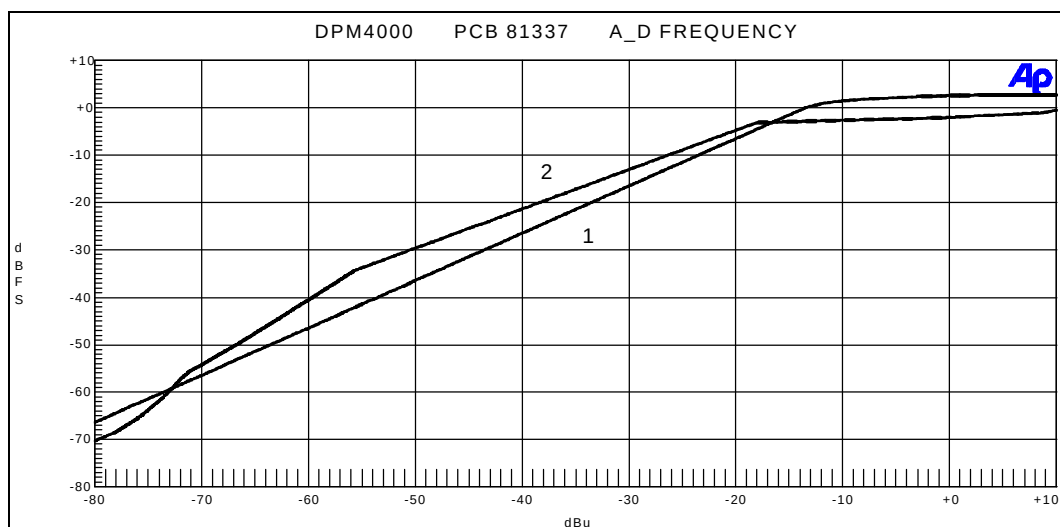
0 ... -80 dB

$< \pm 0.5$ dB



Digital input level (dBFS) as a function of the input signal (dBr), measured at 1 kHz,
0 dBr = 0 dBFS

3.8 Compressor/Limiter [2], [3]



Digital input level (dBFS) as a function of the input level (dBu), measured at 1 kHz,
S1, S2 set to 'MIC', all controls at their counterclockwise margin

1 JP3 and JP4 set to 'LIN', linear

2 JP3 and JP4 in set to 'COMP', Compressor/Limiter ON

3.9 General Data

3.9.1	Dynamic [2] [3] [4]	A-weighted	> 95 dB
3.9.2	S/N Ratio [2] [3] [4]	A-weighted	> 95 dB
3.9.3	Sampling Rate		48 kHz
3.9.4	Data Format		18 Bit linear
3.9.5	Delay	0.52 ms	
3.9.6	Operation Temperature Range		+5 ... +40 °C

6. Size and Weight

6.1	Dimensions W x H x D	37.5 x 81 x 252 mm
6.2	Weight without NRS	160 g
6.3	Weight including 2 x NRS 90233	186 g

7. Extensions

7.1	NRS 90233	Input Transformer Mic/Line	order No. 121 682
-----	-----------	----------------------------	-------------------

8. General

8.1 Measurement Remarks

- All measurement at room temperature – unless otherwise specified, without Compressor/Limiter (JP3 and JP4 set to 'LIN'), without input transformer
- All level values stated ± 1 dB

[1] measured using the Philips Digital multi-meter PM2517X

[2] measured using the Audio Precision System One and Serial Interface Adapter SIA-322 via Input Service Board 83108

[3] Mic/Line switch set to 'Line',

Specifications and Measuring Datas DPM4000

NRS 90218 - 2 Channel Line Out 82222	
EDP No. measured data	822228
Editor	Kaup
Issue Date	21.04.98
Pages	5

1. Operating Voltage [1]

1.1 Nominal operating voltages

U_{A+}	CN1 pin 1a	+12 V $\pm$ 10 %
U_{A-}	CN1 pin 1b	-12 V $\pm$ 10 %
U_{D+}	CN1 pin 4a, 4b	+5 V $\pm$ 5 %
U_{B1}	CN1 pin 16b	+24 V

1.2 Nominal operating range of U_{B1} +21.6 V ... +31.2 V

2. Operating Current [1]

At nominal operating voltages

I_{A+}	CN1 pin 1a	50 mA $\pm$ 10 %
I_{A-}	CN1 pin 1b	25 mA $\pm$ 10 %
I_{D+}	CN1 pin 4a, 4b	25 mA $\pm$ 10 %
I_{B1}	CN1 pin 16b	17 mA $\pm$ 10 %

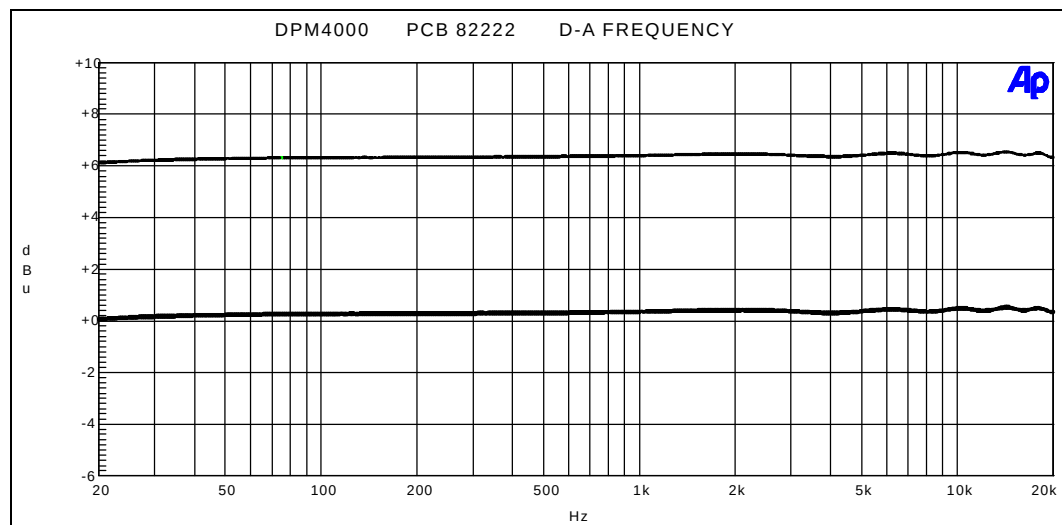
3. Outputs

- 3.1 Connections 2 x XLRM-type socket,
electrically balanced, transformer optionally available
- 3.2 Output impedance (bal.) 114 Ω
- 3.3 Nominal load impedance 600 Ω
- 3.4 Nominal output voltage selectable via JP1 775 mV = 0 dBu
1.55V = +6 dBu

3.5 Frequency Response [2]

20 Hz ... 20 kHz

$\pm 0.5\text{dB}$



Output level (dBu) as a function of the frequency (Hz) at 0 dBFS input level
JP1 in position 0 dBu / 6 dBu

3.6 Distortion [2] [3]

3.6.1 THD+N over level

1kHz, -6 dBFS

$\leq -85\text{ dB} = 0.005\%$

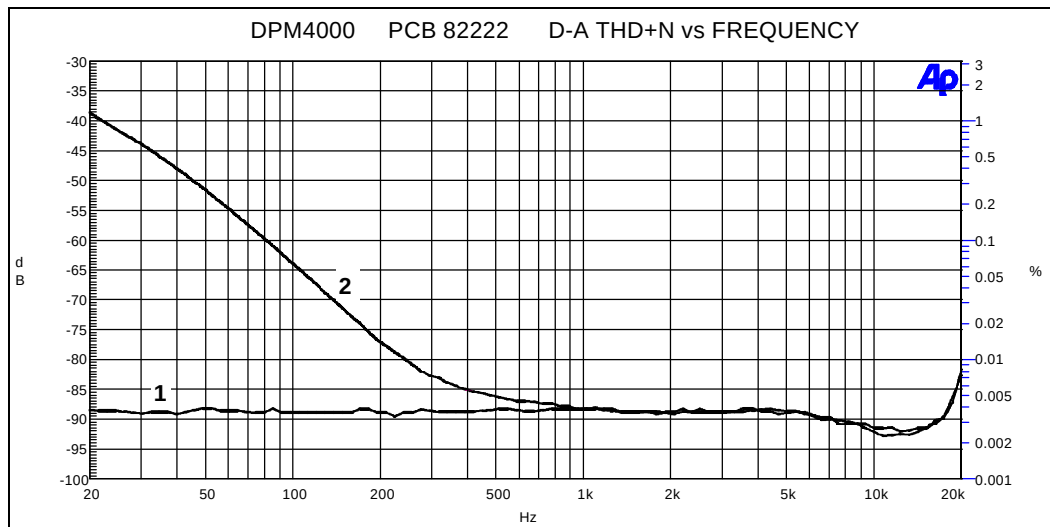


Distortion (THD+N) as a function of the level (dBFS), measured at 1 kHz

3.6.2 THD+N over frequency

1kHz, -6 dBFS

$\leq -85 \text{ dB} = 0.005 \%$



Distortion (THD+N) as a function of the frequency (Hz), measured at -6 dBFS

1. without output transformer

2. with output transformer, NRS 90227

3.7 Interference Voltages [2] [4]

3.7.1 with Signal < -120 dBFS

$U_{\text{Fremd (Q-Peak)}}$

$\leq 44 \mu\text{V} = -85 \text{ dBu}$

$U_{\text{CCIR (Q-Peak)}}$

$\leq 110 \mu\text{V} = -77 \text{ dBu}$

$U_{\text{A bew. (RMS)}}$

$\leq 22 \mu\text{V} = -91 \text{ dBu}$

3.7.2 with Digital Zero - Signal

$U_{\text{Fremd (Q-Peak)}}$

$\leq 12 \mu\text{V} = -96 \text{ dBu}$

$U_{\text{CCIR (Q-Peak)}}$

$\leq 27 \mu\text{V} = -89 \text{ dBu}$

$U_{\text{A bew. (RMS)}}$

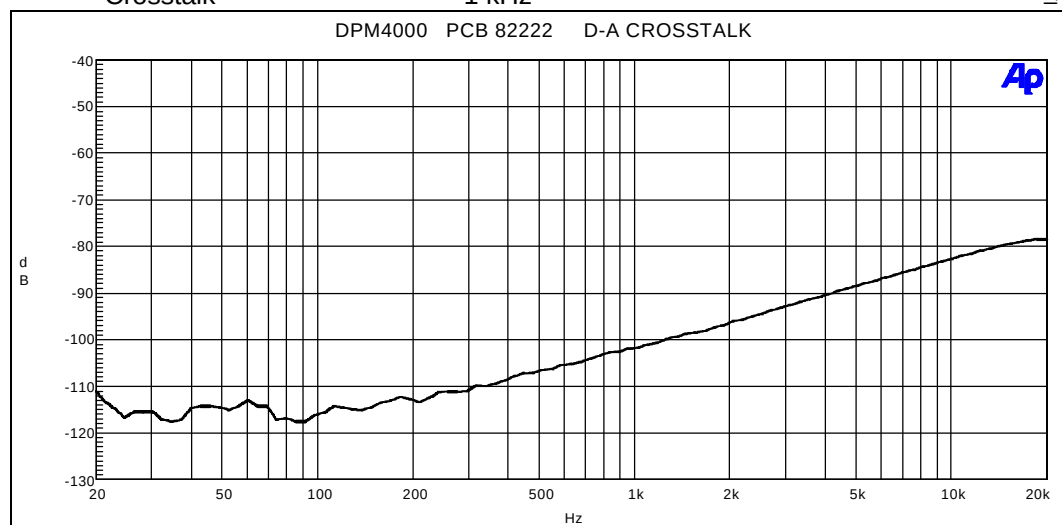
$\leq 5.5 \mu\text{V} = -103 \text{ dBu}$

3.8 Crosstalk Attenuation [2]

Crosstalk

1 kHz

$\leq -95 \text{ dB}$



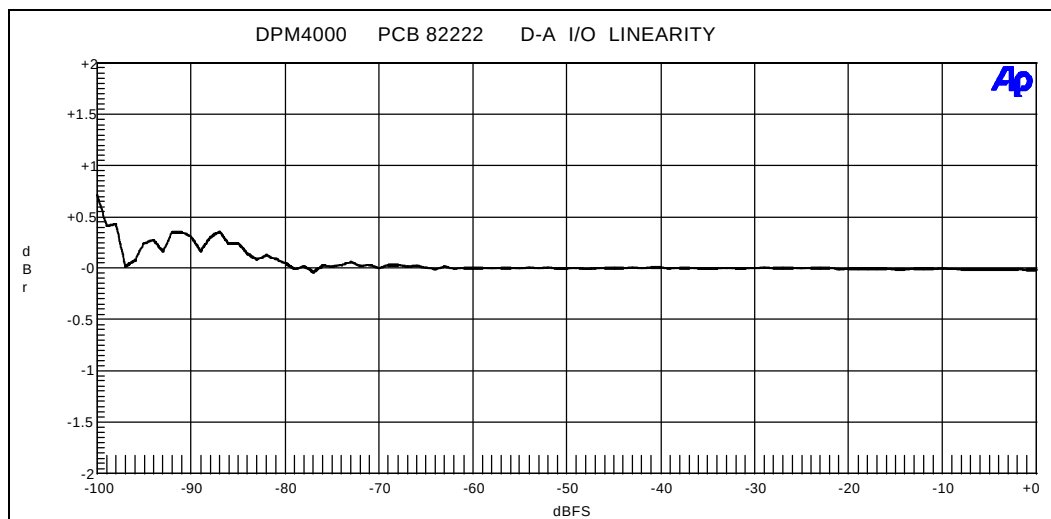
Crosstalk attenuation (dB) as a function of the frequency (Hz), measured at 0 dBFS

3.9 Converter Linearity [2]

Linearity deviation

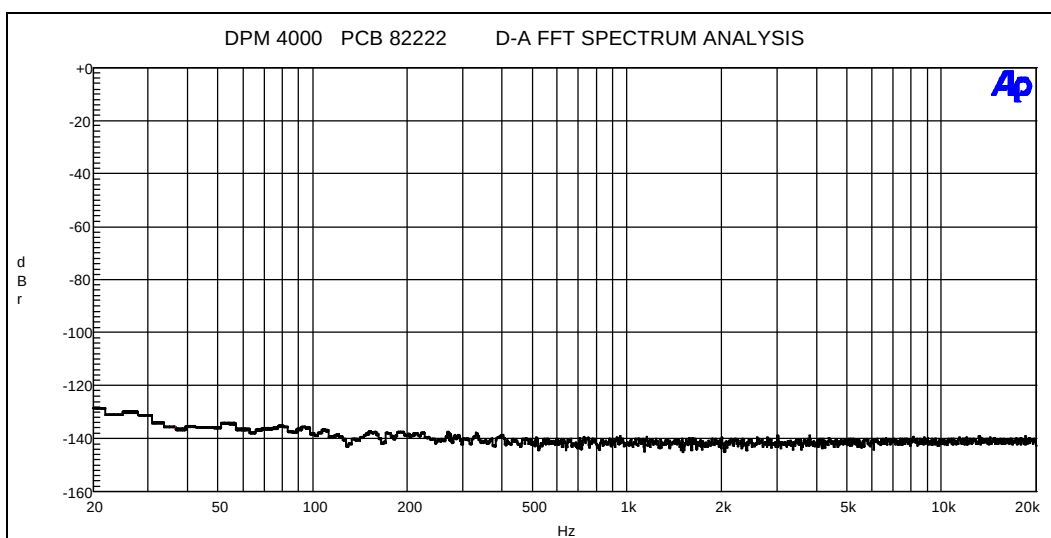
0 ... -80 dB

< ± 0.5 dB

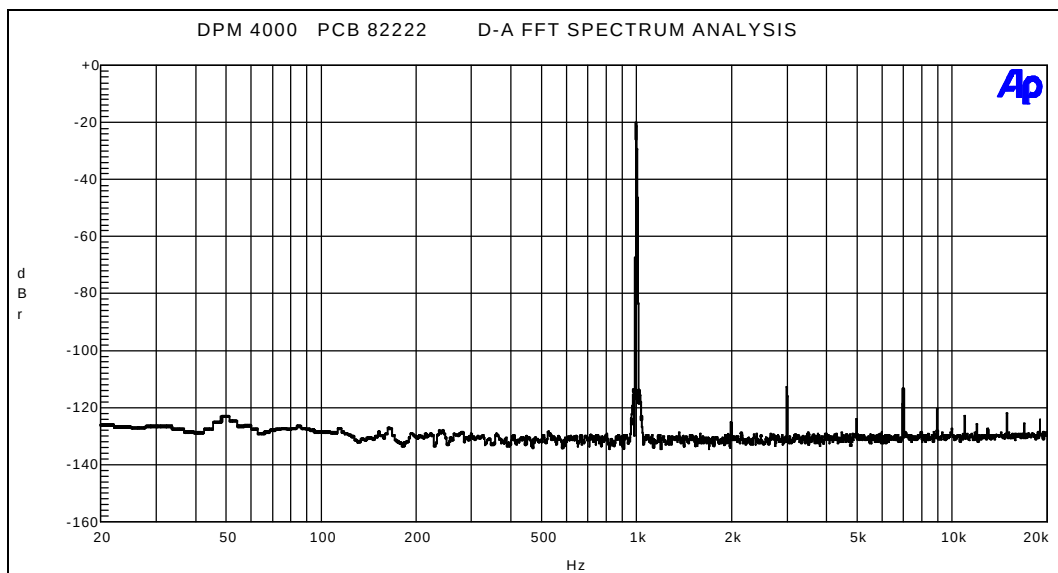


Output level (dBr) as a function of the input level (dBFS), measured at 500 Hz

3.10 Frequency Spectrum [2] [5]



Frequency spectrum 20 Hz - 20 kHz with Digital Zero - Signal



Frequency spectrum 20 Hz - 20 kHz with sine wave input signal and -20 dBFS-level

3.11 Other Specifications

3.11.1	Dynamic [2] [4]	A-weighted	> 97 dB
3.11.2	S/N-ratio [2] [4]	A-weighted	> 109 dB
3.11.3	Sampling rate		48 kHz
3.11.4	Data format		20-Bit linear
3.11.5	Traverse delay		0.3 ms
3.11.6	Operating temperature range		+5 ... +40 °C

4. Dimensions and Weight

4.1	Dimensions W x H x D	37.5 x 81 x 247 mm
4.2	Weight without extensions (NRS)	160 g
4.3	Weight including 2x NRS 90227	255 g

5. Extension-Kits

5.1	NRS 90227	output transformer for a single output	order No. 121 679
-----	-----------	--	-------------------

6. General

6.1 Comments on the testing

- All measurement performed with a nominal load impedance of 600 Ω and at room temperature – unless otherwise specified
- All level values 1 dB

- [1] measured using the Philips Digital Multi-Meter PM2517X
- [2] measured using the Audio Precision System One and Serial Interface Adapter SIA-322 via Output Service Board 83109
- [3] Measurement bandwidth 22 Hz ... 22 kHz, with 20 kHz Lo-Pass Filter
- [4] measured with the JP1 set to +6 dBu
- [5] FFT with 2,000 dots, average of 16 test

Specifications and Measuring Datas DPM 4000

NRS 90219 - 8 I/O Logic Control 86241	
EDP No. measured data	862418
Editor	Kaup
Issue Date	30.04.98
Pages	1

1. Operating Voltage [1]

1.1 Nominal operating voltages

U_{D+}	CN5 pin 2a, 2b, 2c	+5 V $\pm$ 5 %
U_{B1}	CN5 pin 16a, 16b, 16c	+24V

1.2 Nominal operating range of U_{B1} +21.6 V ... +31.2 V

2. Operating Current [1]

At nominal operating voltages,
measured using the service program ' /Service/Logic/Out ' - all outputs active,
as well as service program ' /Service/Start/Slave ' - NU-output with max. 500mA loaded

I_{D+}		16 mA $\pm$ 10 %
I_{B1}	without slave clocks	130 mA $\pm$ 10 %
$I_{B1 \max}$	incl. max. amount of slave clocks	650 mA

3. Inputs [1]

measured using the service program ' /Service/Logic/In '

U_{IN}	$\leq \pm 5 \text{ V} = \text{Low}$
U_{IN}	$\geq \pm 10 \text{ V} = \text{High}$
$U_{IN \max}$	$= \pm 31 \text{ V}$

4. Outputs [1]

4.1 Slave clock output OUT1

measured using the service program ' /Service/ Start/Slave '

U_{OUT}	24 V DC
$I_{\max}$	500 mA $\pm$ 5 %
electronically protected against overload	

4.2 Logic outputs OUT2 ... OUT8
measured using the service program ' /Service/Logic/Out '
floating relay contacts
 $I_{\max}$ at 24 V DC 1 A

5. Other Specifications

5.1 Operating temperature range +5 ... +40 °C

6. Dimensions and Weight

6.1 Dimensions W x H x D 37.5 x 81 x 247 mm
6.2 Weight 195 g

7. General

7.1 Comments to the testing
- All measurement performed at room temperature – unless otherwise specified

[1] measured using the Philips Digital Multi-Meter PM2517X

Measuring Datas Complete Unit	
Unit	DPM 4000
Unit No.	121 619
EDP No. measured data	354 867
	Kaup
Date	25.05.98

1. Power Supply

1.1	Reference Value	24V DC
1.2	Nominal Power Supply	24V DC
1.3	Nominal Power Supply Operation Range	21.6V ... 31,2V
1.4	Switching-off Threshold at Undervoltage	≤ 12V
1.5	Switching-off Paging Station and Remote Control Supply Voltage	≤ 17V
1.6	Power Consumption under Nominal Conditions [1]	360 mA ± 10%
1.7	Maximum Power Consumption [2]	6.7 A ± 10%

2. Logic INPUT / OUTPUT Characteristics

see Measured Data sheet NRS 90219 - EDP. No. 862418

3. Audio Output Characteristics

see Measured Data sheet NRS 90218 - EDP. No. 822228

4. Signal Interface, RS232-Interface, Remote control, Monitor Output Characteristics

see Measured Data sheet Interface board 80430 - EDP. No. 804308, paragraph. 8, 9, 12, 13

4.1 RS232 Data Transfer

The PC has to be configured according to the following settings:

- 19200 Baud
- 8 Data bits
- 1 Stop bit
- no parity
- Xon/Xoff - protocol

5. Audio Measurements

5.1 Audio Outputs

Volume values for slot # 3 Out1/Out2 set to "0"

5.1.1 Output Level [3]

Via service program ' /service/sine ' output 0dB sine signal
/service sine 1 1000 0 - 1 kHz, 0 dB output via channel 1
/service sine 2 1000 0 - 1 kHz, 0 dB output via channel 2

Output voltage symmetrical 775 mV = 0 dBu

5.1.2 Interference Voltages [3]

Via service program ' /service/sine ' output -120dB sine signal
/service sine 1 1000 -120 - 1 kHz, -120 dB output via channel 1
/service sine 2 1000 -120 - 1 kHz, -120 dB output via channel 2

$U_{\text{Fremd (Q-Peak)}}$	$\leq 25 \mu\text{V} = -90 \text{ dBu}$
$U_{\text{CCIR (Q-Peak)}}$	$\leq 60 \mu\text{V} = -82 \text{ dBu}$
$U_{\text{A bew. (RMS)}}$	$\leq 13 \mu\text{V} = -96 \text{ dBu}$

Via service program ' /service/sine ' output -200dB sine signal
/service sine 1 1000 -200 - Digital zero output via channel 1
/service sine 2 1000 -200 - Digital zero output via channel 2

$U_{\text{Fremd (Q-Peak)}}$	$\leq 8 \mu\text{V} = -100 \text{ dBu}$
$U_{\text{CCIR (Q-Peak)}}$	$\leq 20 \mu\text{V} = -92 \text{ dBu}$
$U_{\text{A bew. (RMS)}}$	$\leq 4 \mu\text{V} = -106 \text{ dBu}$

5.2 Internal Monitor Bus [4]

Volume values for slot # 3 Out1/Out2 set to "0"
level-setting identical to 5.1.1

/moni vol 0 - Volume value for monitor bus set to 0dB
/moni sel out - Switch the output to monitor bus
/moni idx 1 - Assigning output channel 1
/moni idx 2 - Assigning output channel 2

Level at the monitor output with 8Ω load 620 mV = -2 dBu

5.3 External Monitor Bus [4]

Introduce a 1kHz sine signal with a level of
 $1.27 \text{ V}_{\text{RMS}} = +4.3\text{dBu}$ into the external monitor input (Remote control)

/moni vol +6 - Volume value for monitor bus set to +6dB
/moni sel ext - Assign the Remote-channel to the monitor bus

Level at the monitor output with 8Ω load 680 mV = -1.1 dBu

6. LED Indicators

6.1	Fault	lights after switching the unit power to ON until initialization is complete, the unit is ready for operation and in case of fault
6.2	Power	lights when the supply voltage is present
6.3	Ready	lights, when the unit is ready
6.4	DCF77	blinks (blink per second) during signal reception and lights upon synchronization

7. Other Data

7.1	Pilot Tone Frequency	15,625 kHz $\pm$ 1%
7.2	Operation Temperature Range	+5 ... +40 °C
7.3	Temperature Range for Storing and Transport	-40 ... +70 °C
7.4	Battery for Real-time Clock	
	Lithium-type battery 3V / 220 mAh	type CR2032 or equivalentOrd.-No. 354 042

8. Dimensions and Weight

8.1	Dimensions W x H x D	19" (483 mm) x 2HE (88 mm) x 337 mm
8.2	Installation Depth without Connectors	340 mm
8.3	Installation Depth including Connectors	max. 410 mm
8.4	Weight, equipped as described under [1]	6.4 kg

9. General Remarks

9.1 Measurement was performed using the following equipment:

DC Power supply
Philips Digital Multi-meter PM2517X
Audio Precision System One

9.2 Measurement Comments

- All measuring performed at normal room temperature, unless differently specified
- All stated levels $\pm$ 1 dB

[1] Nominal Conditions

Unit equipped with

1x NRS 90218 - 2 ch. line out in slot # 3

1x NRS 90219 - 8 I/O logic control in slot # 5

Operation Voltage 24 V DC

All in-/outputs open, PC connected via RS232-interface, relay on the Logic-I/O module switched off.

[2] Unit equipped with

2x NRS 90215 - 2 ch. paging consoles in slots # 1 and 2

2x NRS 90218 - 2 ch. line out in slots # 3 and 4

1x NRS 90219 - 8 I/O logic control in slot # 5

Operation Voltage 24 V DC, all relays pulled,

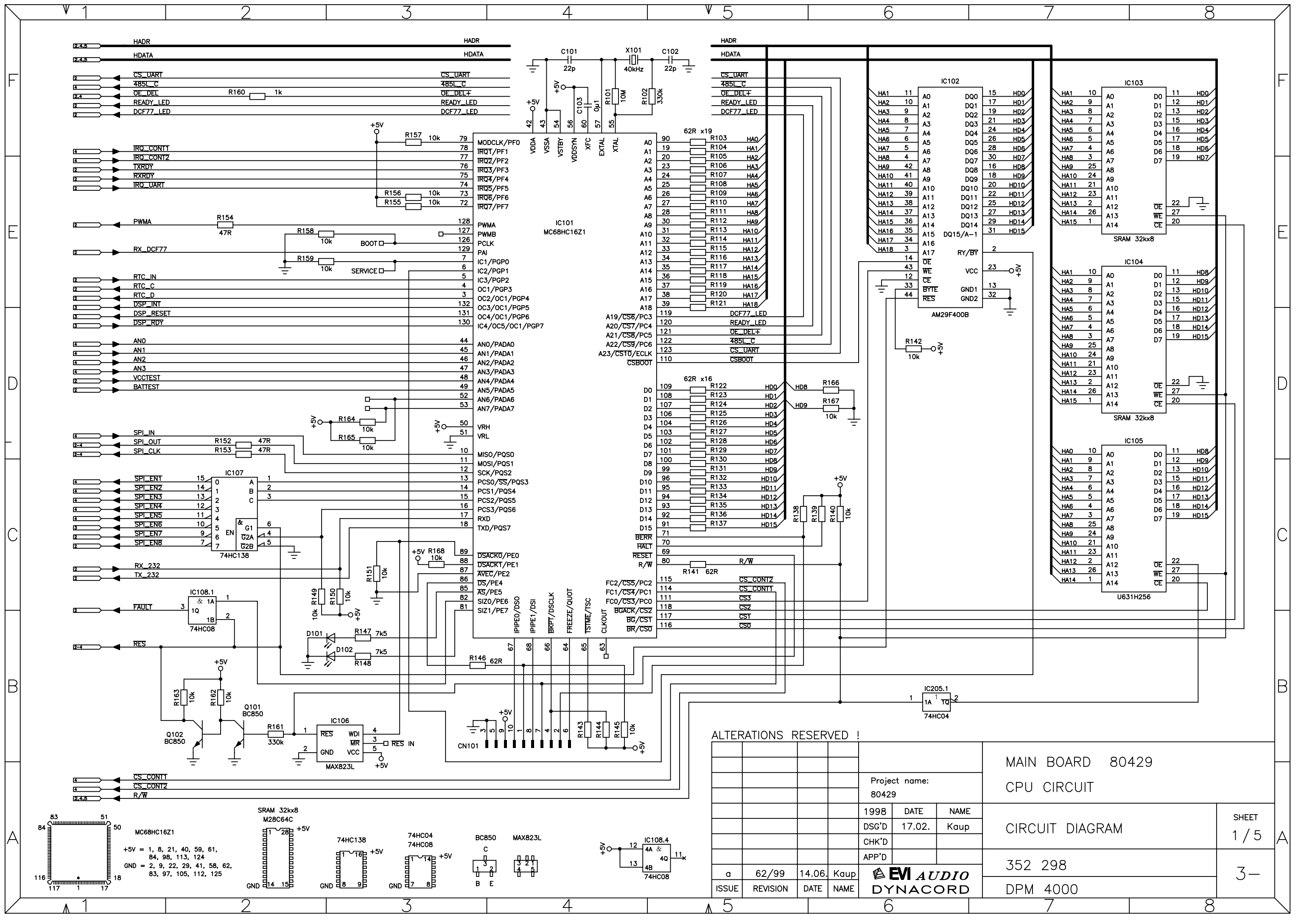
Slave clock output with 0.5A load,

4 paging stations and 1 remote interface with 1A load each,

24V-Output of the signal interface with 0.4A load.

[3] Measured with Audio Precision System one, analyzer input impedance = 600 Ω

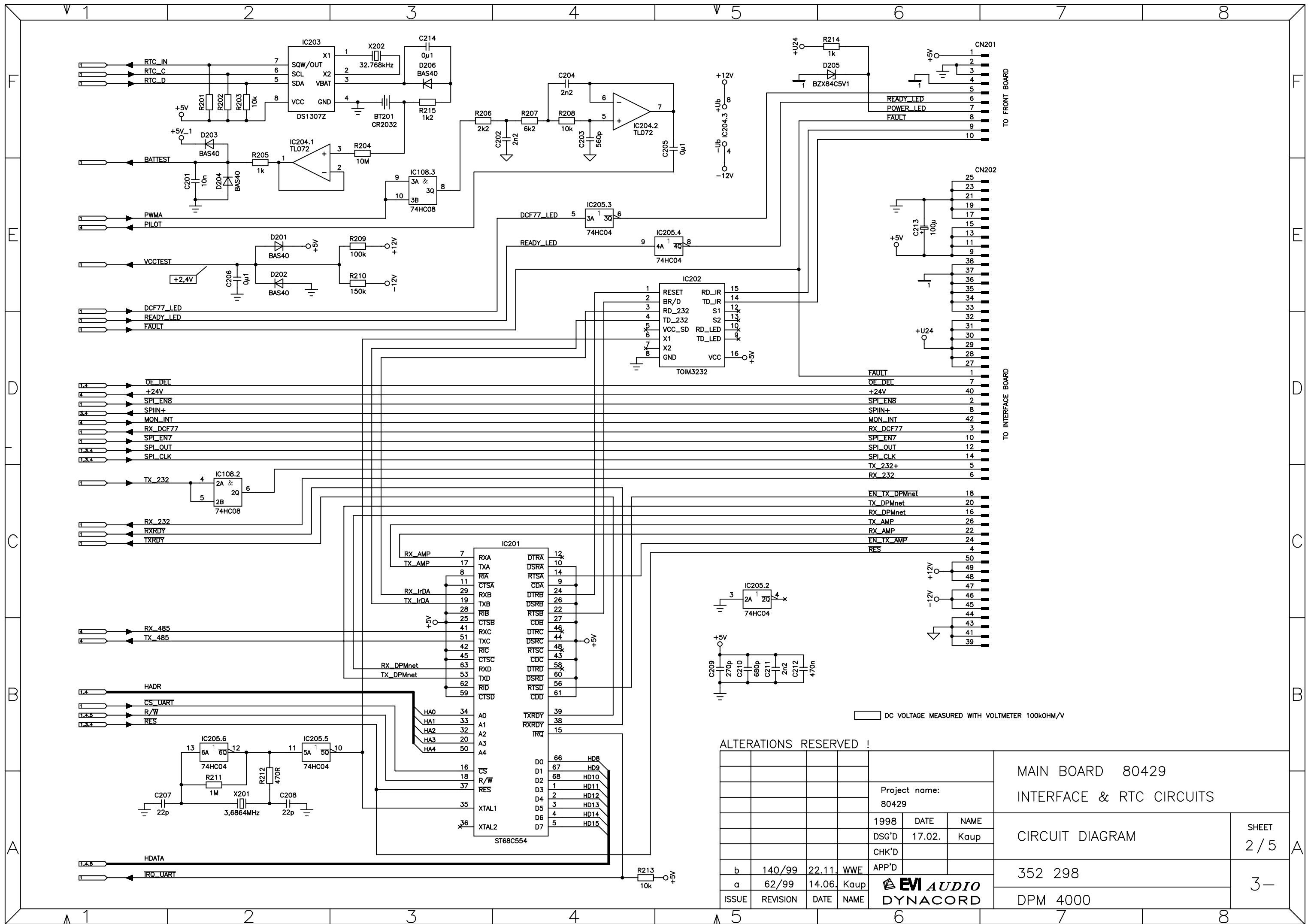
[4] Measured with Audio Precision System one, analyzer input impedance = 100 k Ω



ALTERATIONS RESERVED !

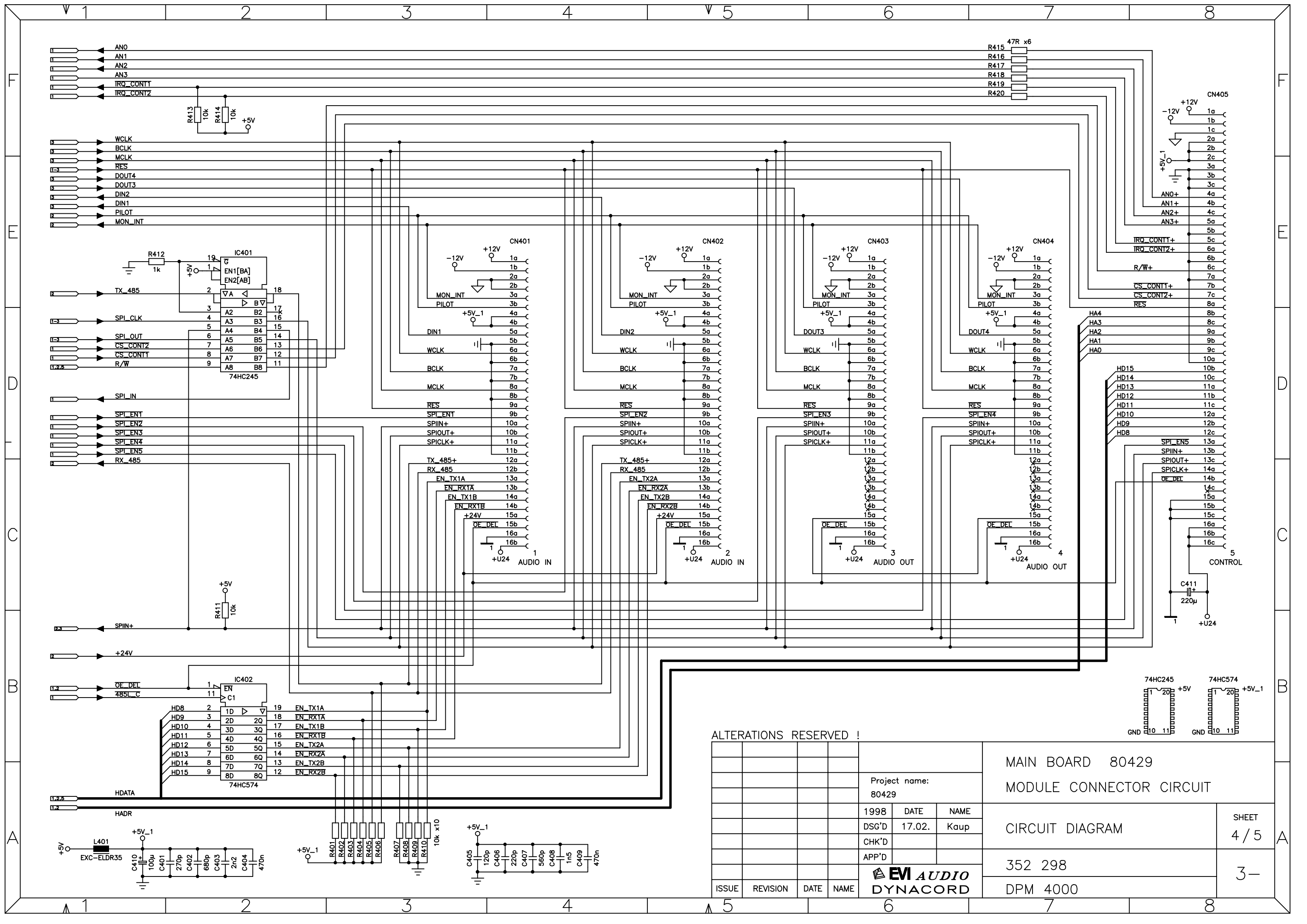
							MAIN BOARD 80429	
				Project name: 80429			CPU CIRCUIT	
				1998	DATE	NAME	CIRCUIT DIAGRAM	SHEET 1 / 5
				DSG'D	17.02.	Kaup		
				CHK'D				
				APP'D			352 298	3—
a	62/99	14.06.	Kaup					
ISSUE	REVISION	DATE	NAME				DPM 4000	

EV AUDIO
DYNACORD



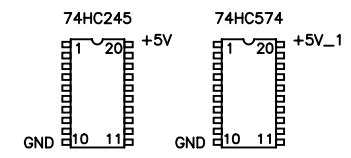


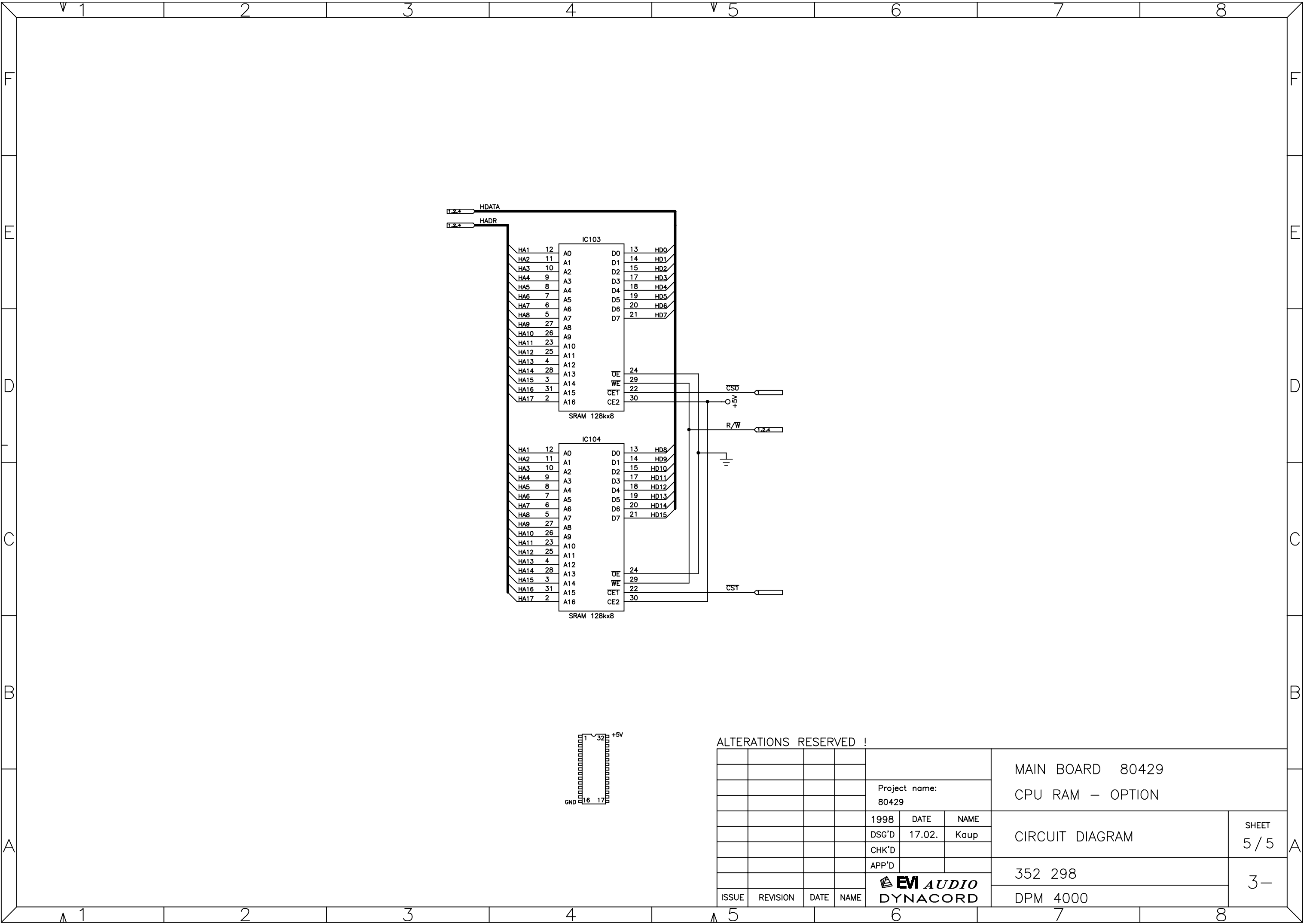
					MAIN BOARD 80429		SHEET 3 / 5	A
					DSP & CLOCK GENERATOR CIRCUIT			
					CIRCUIT DIAGRAM			
					352 298			
a	62/99	14.06.	Kaup			3—		
ISSUE	REVISION	DATE	NAME			DPM 4000		



ALTERATIONS RESERVED !

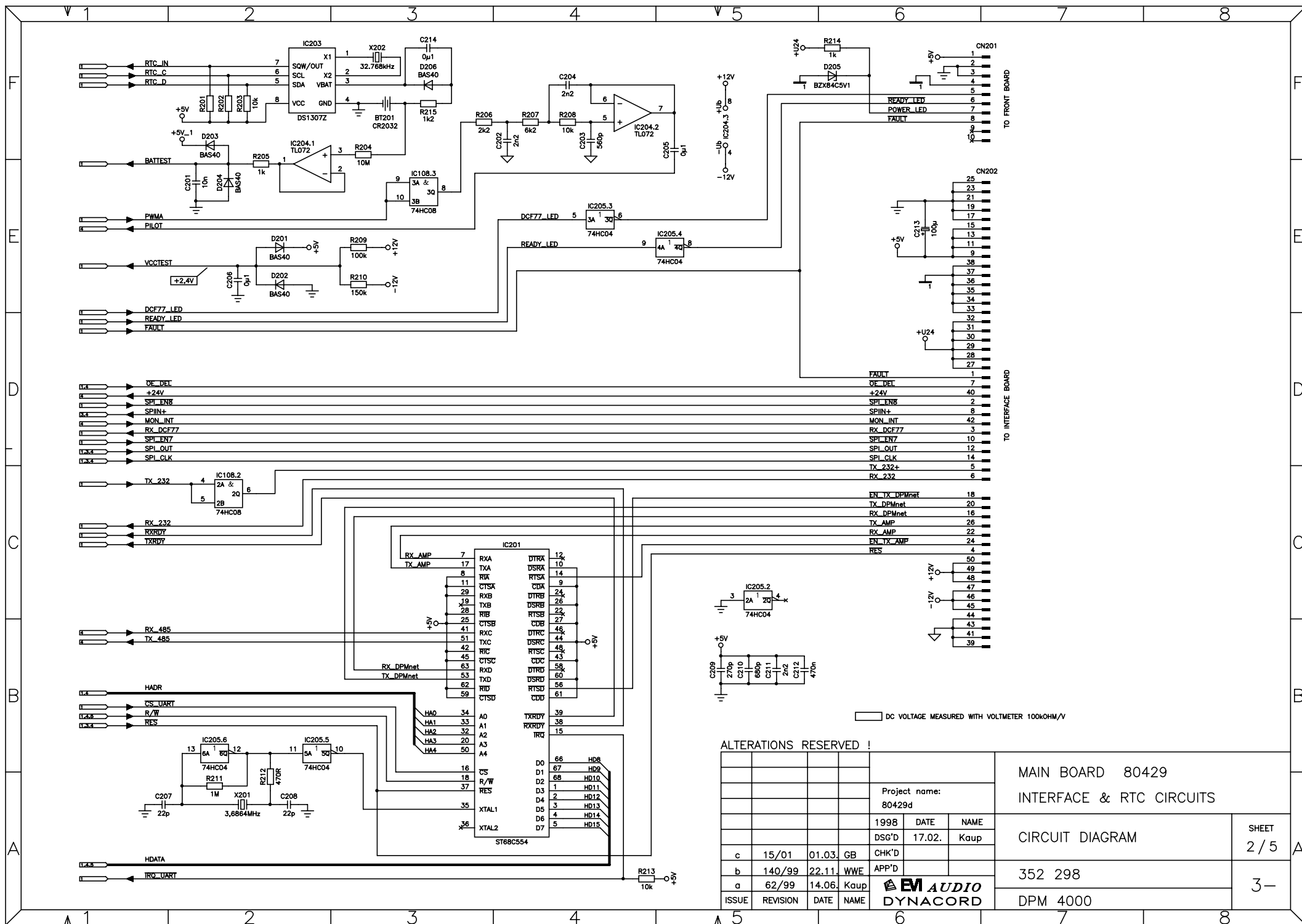
				Project name: 80429			MAIN BOARD 80429		A
							MODULE CONNECTOR CIRCUIT		
				1998	DATE	NAME	CIRCUIT DIAGRAM	SHEET 4 / 5	
				DSG'D	17.02.	Kaup			
				CHK'D					
				APP'D					
							352 298	3—	
ISSUE	REVISION	DATE	NAME	DPM 4000					
5				6			7		8





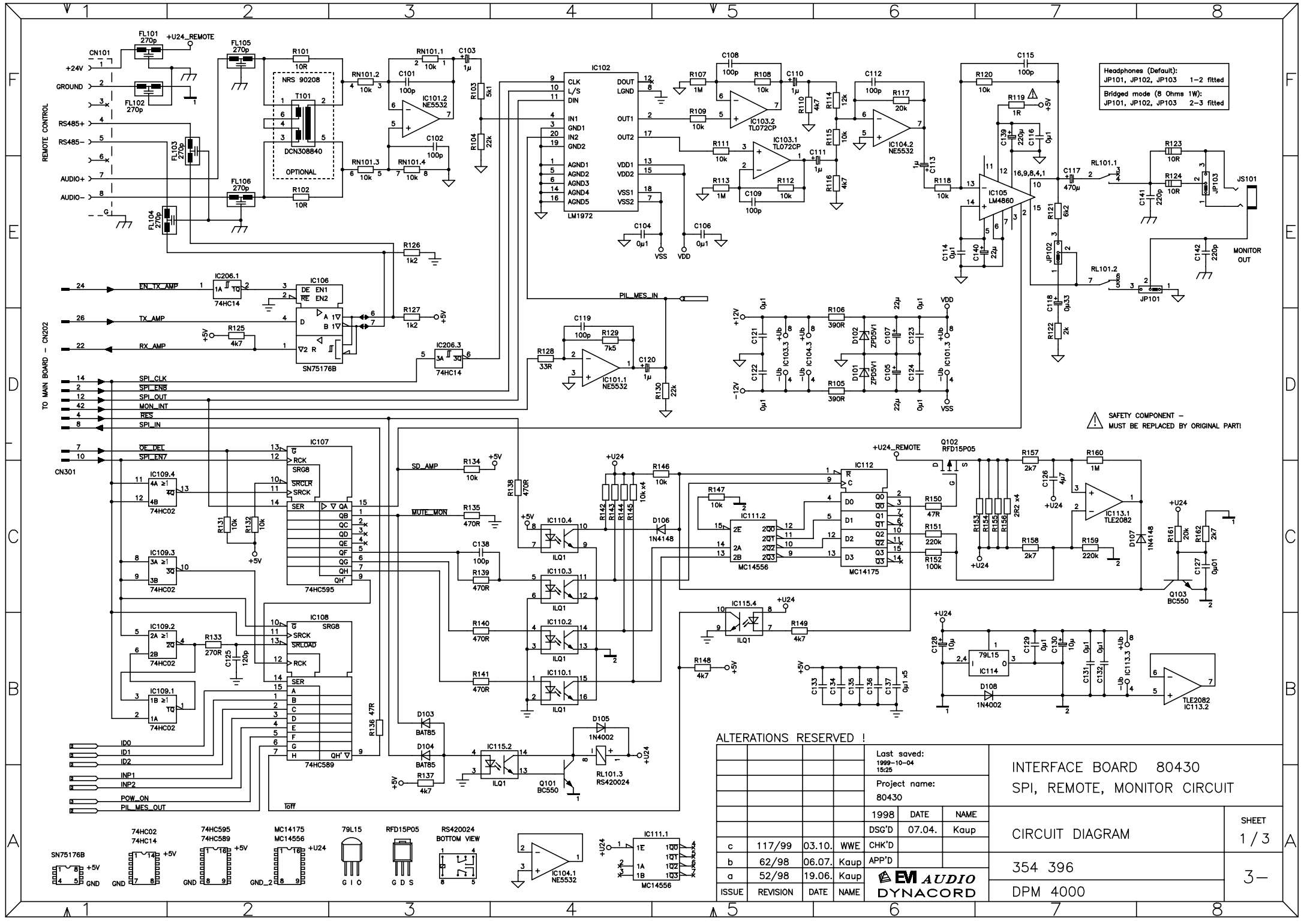
ALTERATIONS RESERVED !

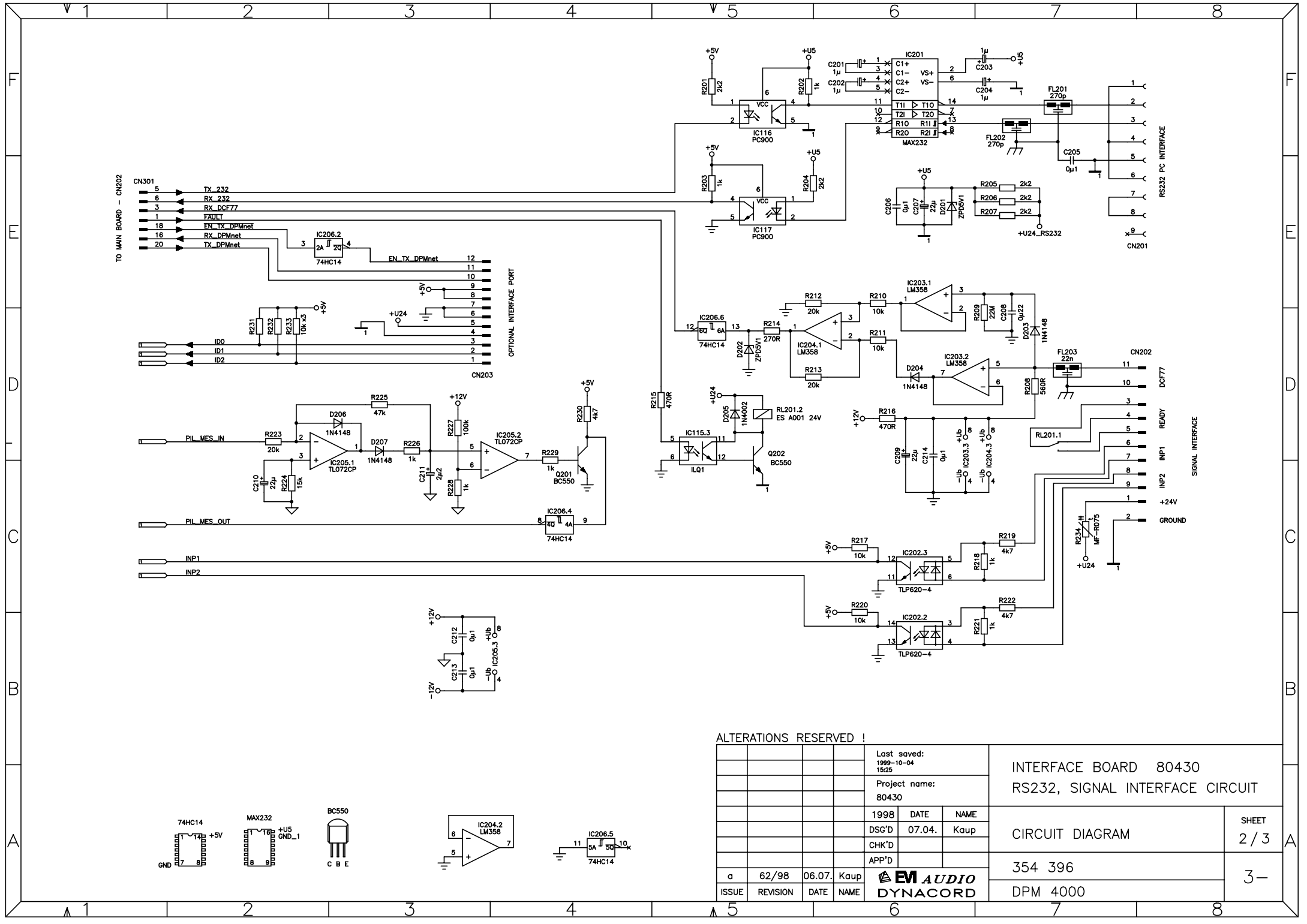
				Project name: 80429			MAIN BOARD 80429 CPU RAM – OPTION	
				1998	DATE	NAME	CIRCUIT DIAGRAM	SHEET 5 / 5
				DSG'D	17.02.	Kaup		
				CHK'D				
				APP'D				
				EVI AUDIO DYNACORD			352 298	3 –
ISSUE	REVISION	DATE	NAME				DPM 4000	

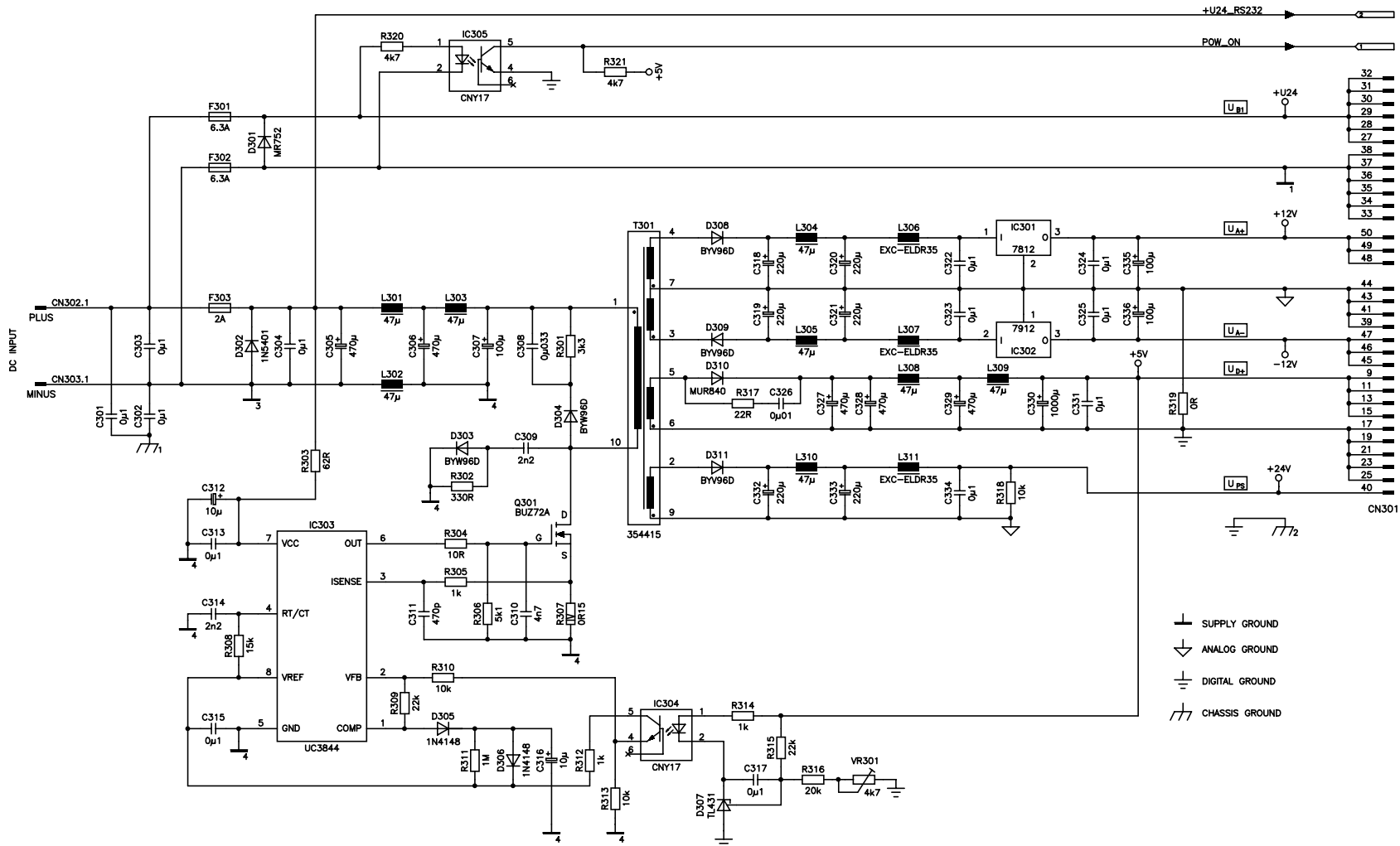


ALTERATIONS RESERVED !

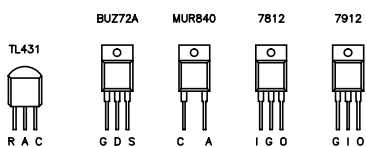
				MAIN BOARD 80429	
				INTERFACE & RTC CIRCUITS	
				Project name:	
				80429d	
		1998	DATE	NAME	CIRCUIT DIAGRAM
		DSG'D	17.02.	Kaup	
c	15/01	01.03.	GB	CHK'D	352 298
b	140/99	22.11.	WWE	APP'D	
a	62/99	14.06.	Kaup		3-
ISSUE	REVISION	DATE	NAME		
				EMI AUDIO DYNACORD	DPM 4000





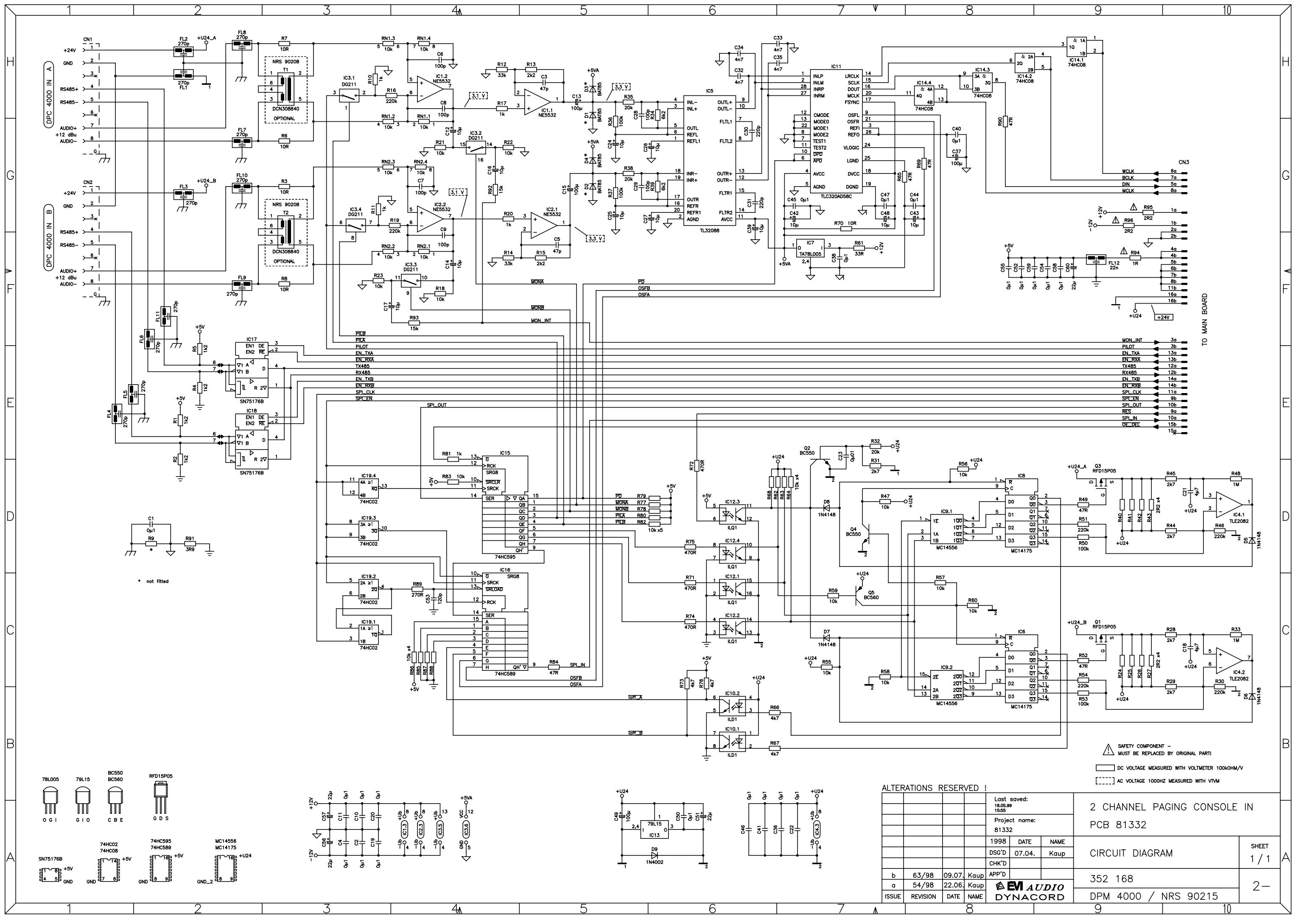


⏏ SUPPLY GROUND
⏏ ANALOG GROUND
⏏ DIGITAL GROUND
⏏ CHASSIS GROUND



ALTERATIONS RESERVED !

				Last saved: 1999-10-04 15:25			INTERFACE BOARD 80430 DC/DC POWER SUPPLY	
				Project name: 80430				
		1998	DATE	NAME	CIRCUIT DIAGRAM		SHEET 3 / 3	
		DSG'D	07.04.	Kaup				
		CHK'D						
		APP'D			354 396 DPM 4000		3—	
a	97/98	27.10.	Kaup	 EM AUDIO DYNACORD				
ISSUE	REVISION	DATE	NAME					



* not fitted

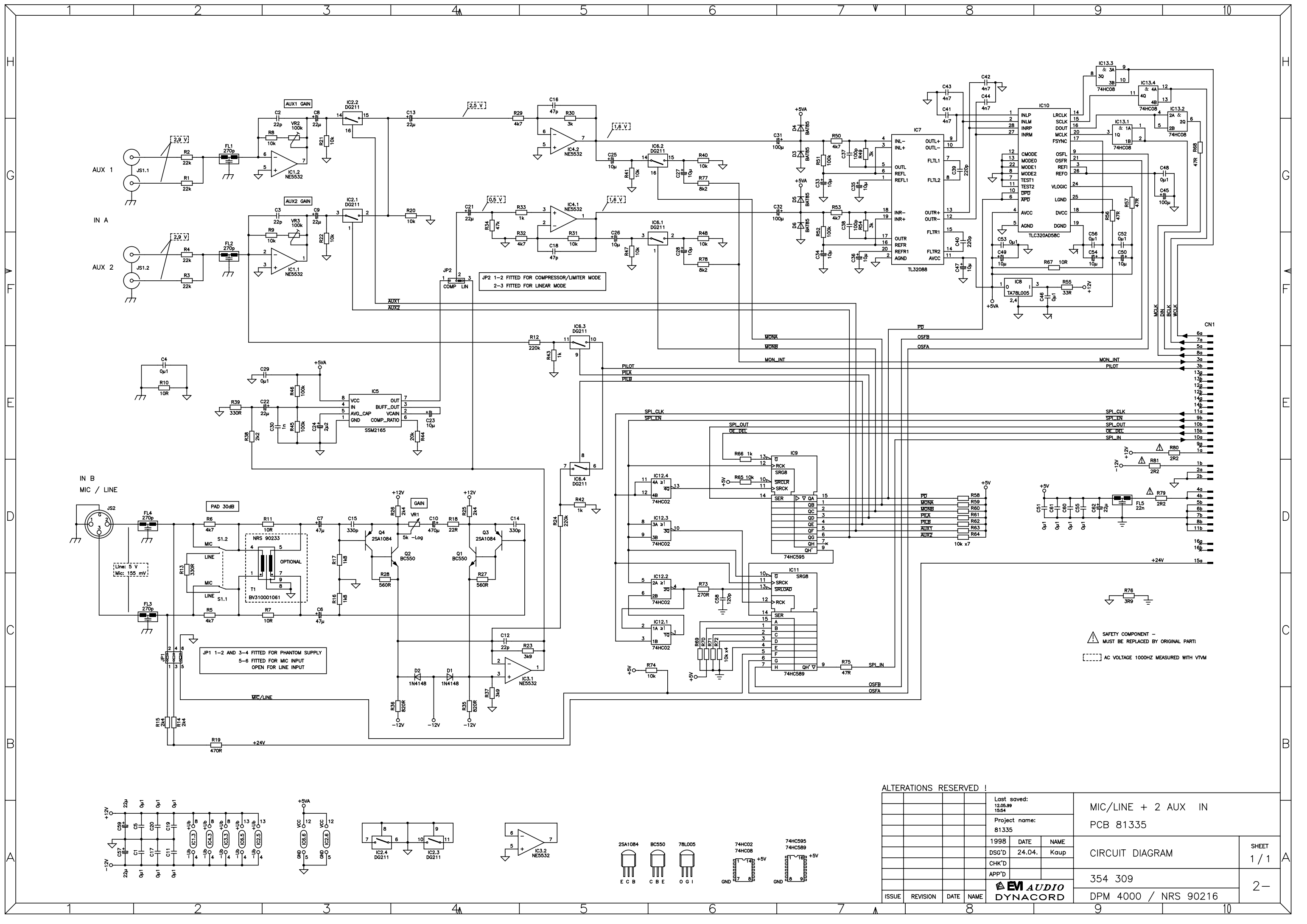
SAFETY COMPONENT -
MUST BE REPLACED BY ORIGINAL PART!

DC VOLTAGE MEASURED WITH VOLTMETER 100kOHM/V

AC VOLTAGE 1000HZ MEASURED WITH VTVM

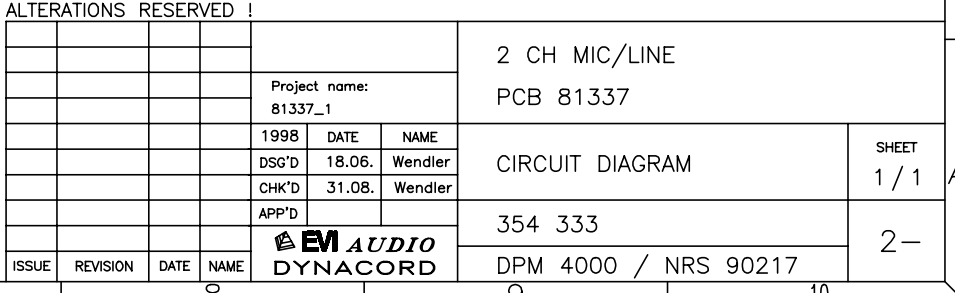
ALTERATIONS RESERVED !

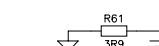
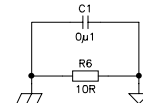
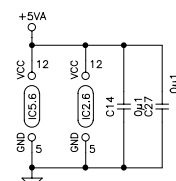
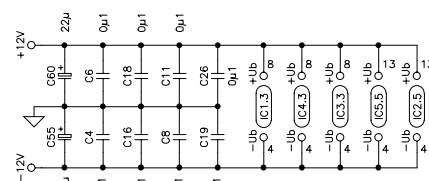
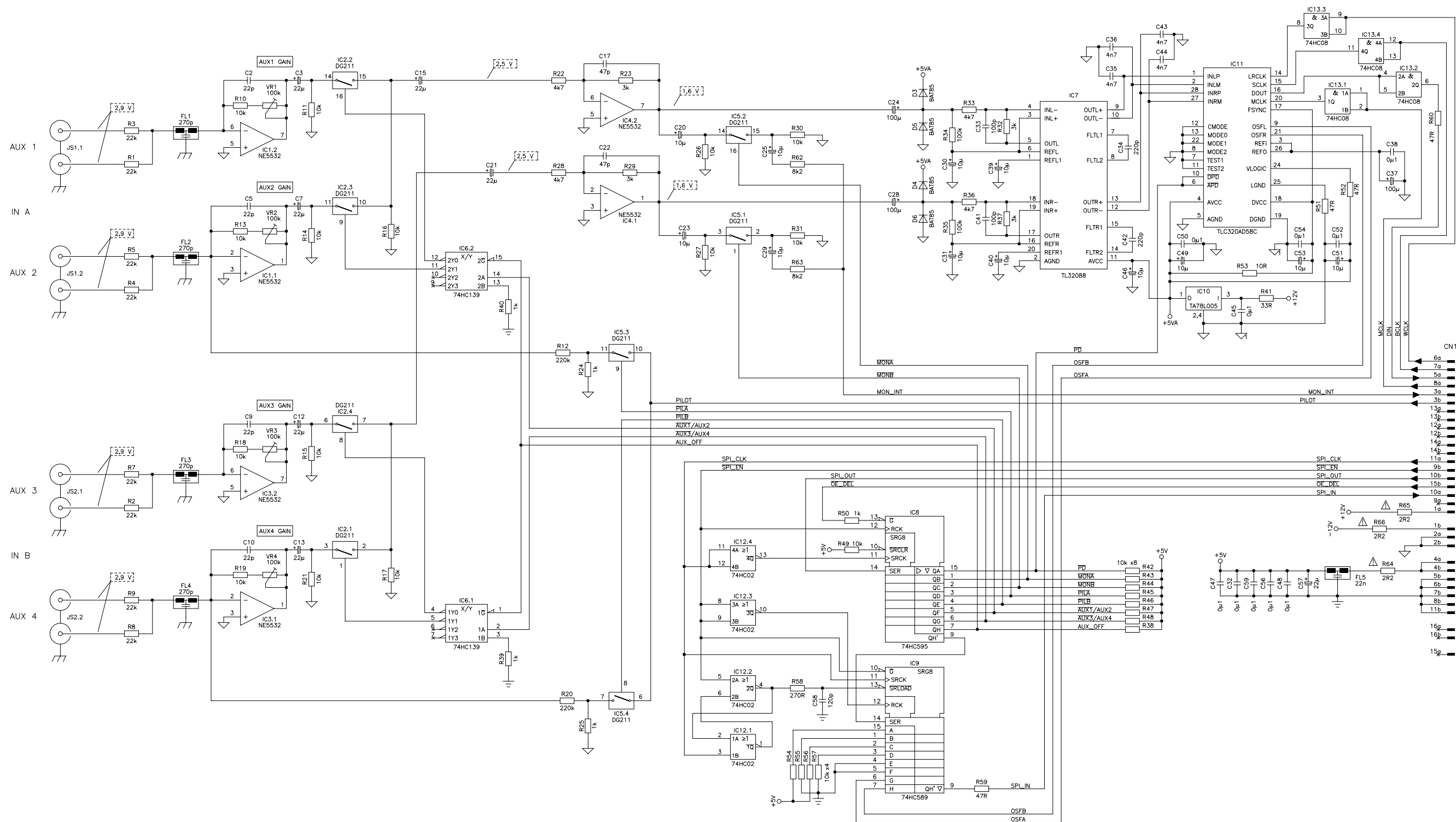
					Last saved: 18.05.99 15:55		2 CHANNEL PAGING CONSOLE IN PCB 81332		
					Project name: 81332				
					1998	DATE	NAME	CIRCUIT DIAGRAM	SHEET 1 / 1
					DSG'D	07.04.	Kaup		
					CHK'D				
b	63/98	09.07.	Kaup		APP'D			352 168	2—
a	54/98	22.06.	Kaup						
ISSUE	REVISION	DATE	NAME		EM AUDIO DYNACORD			DPM 4000 / NRS 90215	



ALTERATIONS RESERVED !

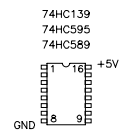
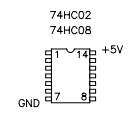
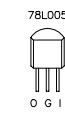
Last saved: 12.05.99 15:54				MIC/LINE + 2 AUX IN			
Project name: 81335				PCB 81335			
1998	DATE	NAME		CIRCUIT DIAGRAM			
DSG'D	24.04.	Kaup		354 309			
CHK'D				DPM 4000 / NRS 90216			
APP'D				2-			
ISSUE	REVISION	DATE	NAME	EM AUDIO DYNACORD			





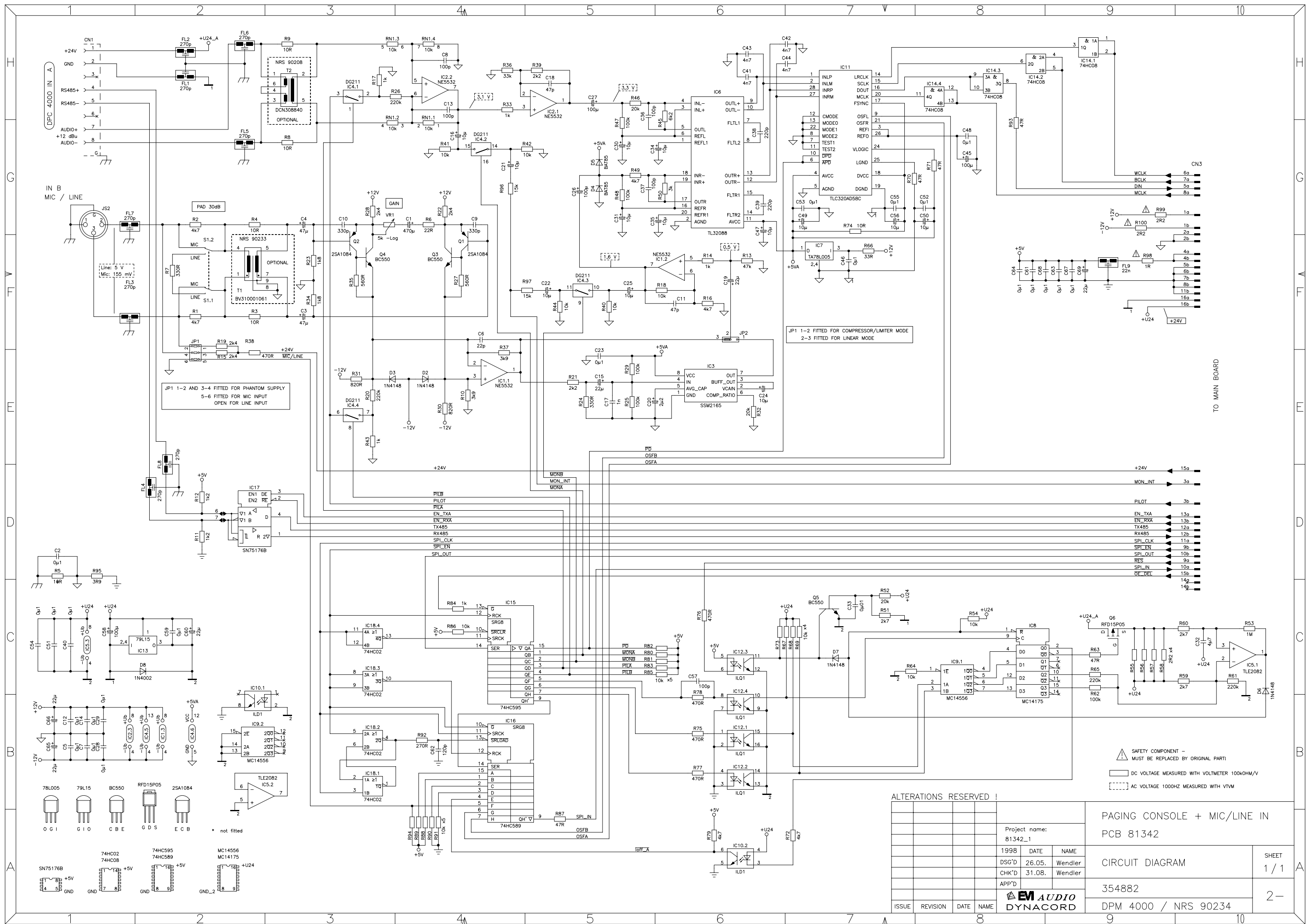
SAFETY COMPONENT –
MUST BE REPLACED BY ORIGINAL PART!

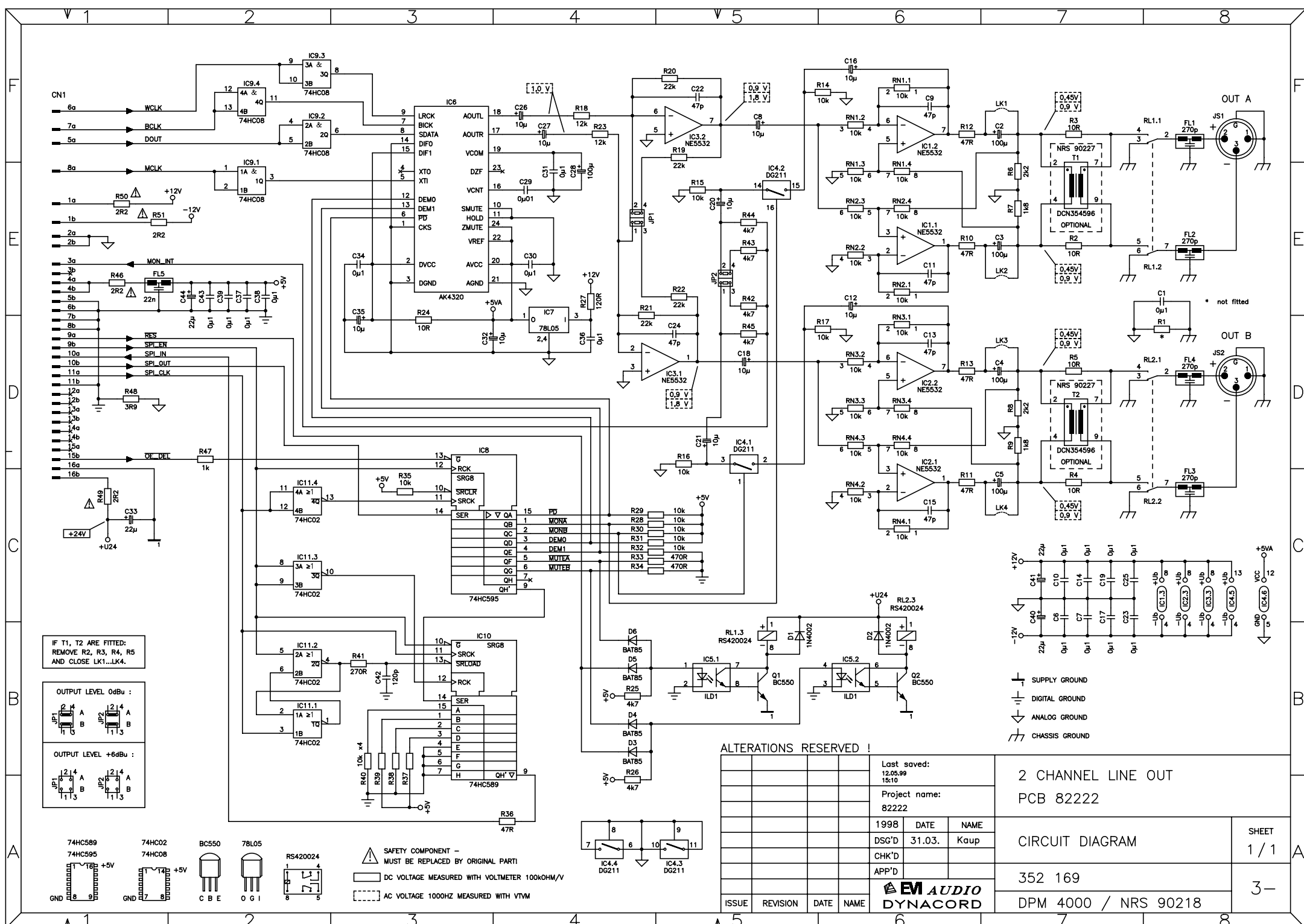
AC VOLTAGE 1000HZ MEASURED WITH VTVM

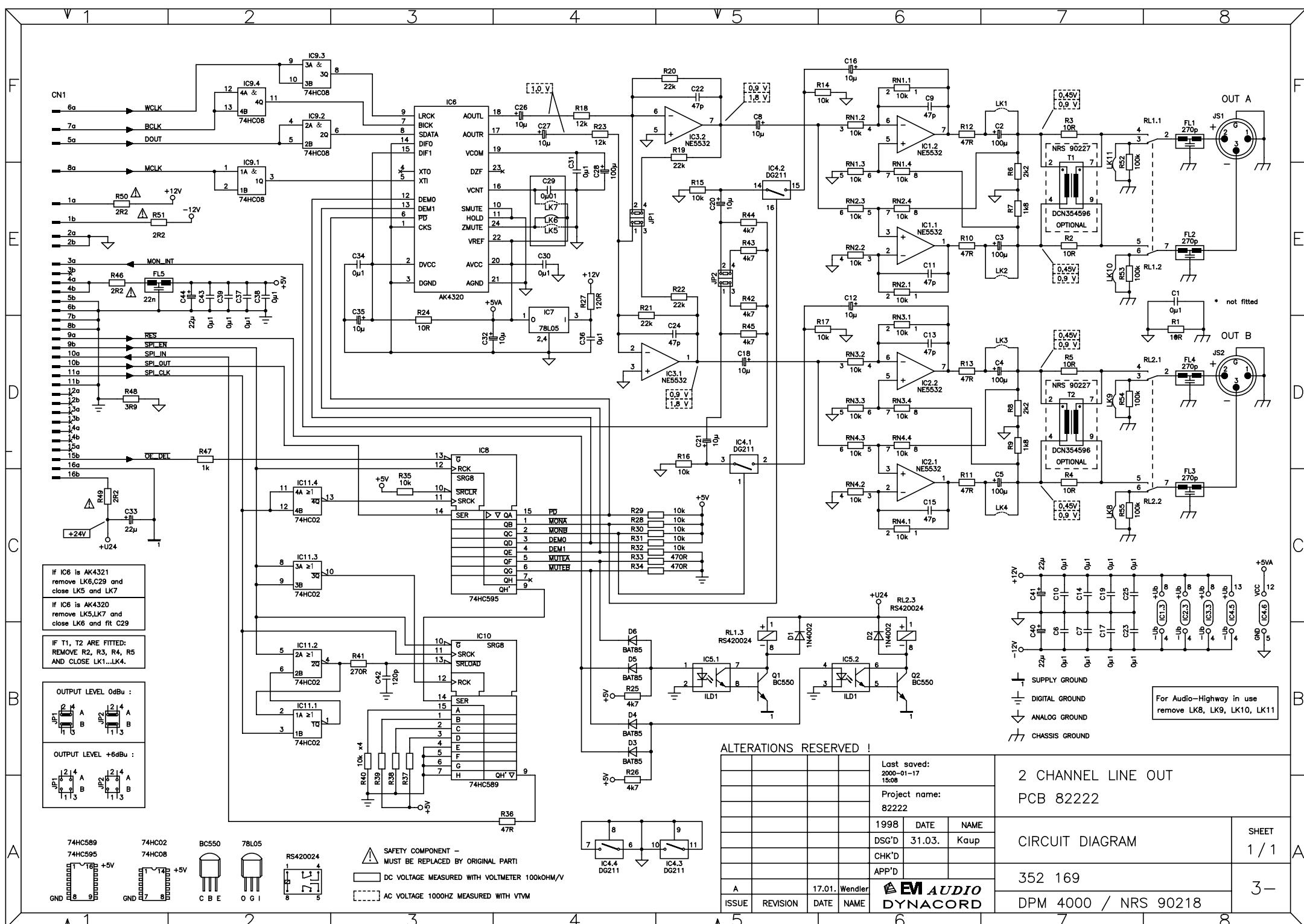


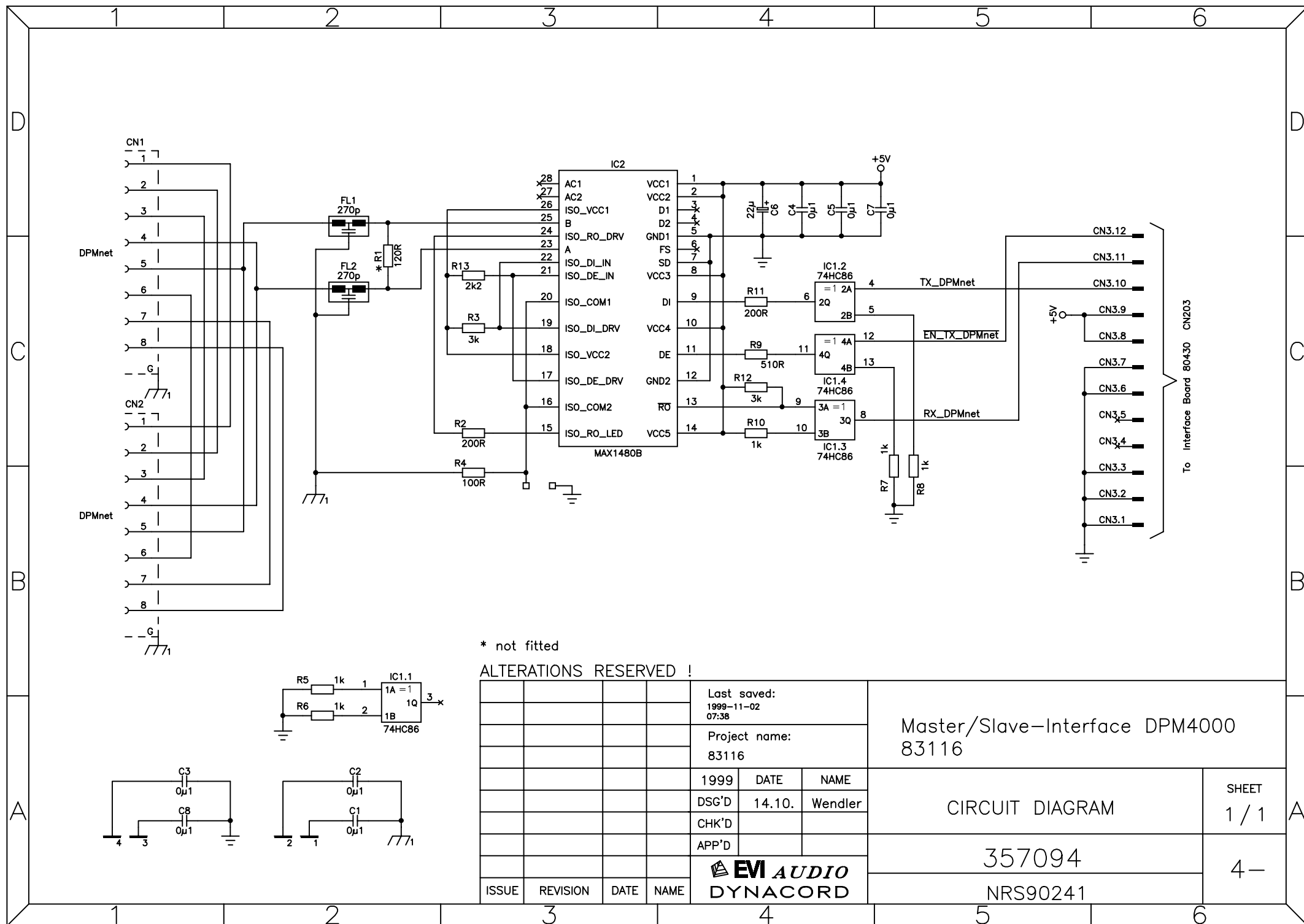
ALTERATIONS RESERVED !

Project name: 81341_0				2 CH – 2 AUX IN	
1998				PCB 81341	
DSG'D				CIRCUIT DIAGRAM	
CHK'D				31.08.	
APP'D				354 795	
EM AUDIO DYNACORD				DPM 4000 / NRS 90228	
ISSUE	REVISION	DATE	NAME	2-	





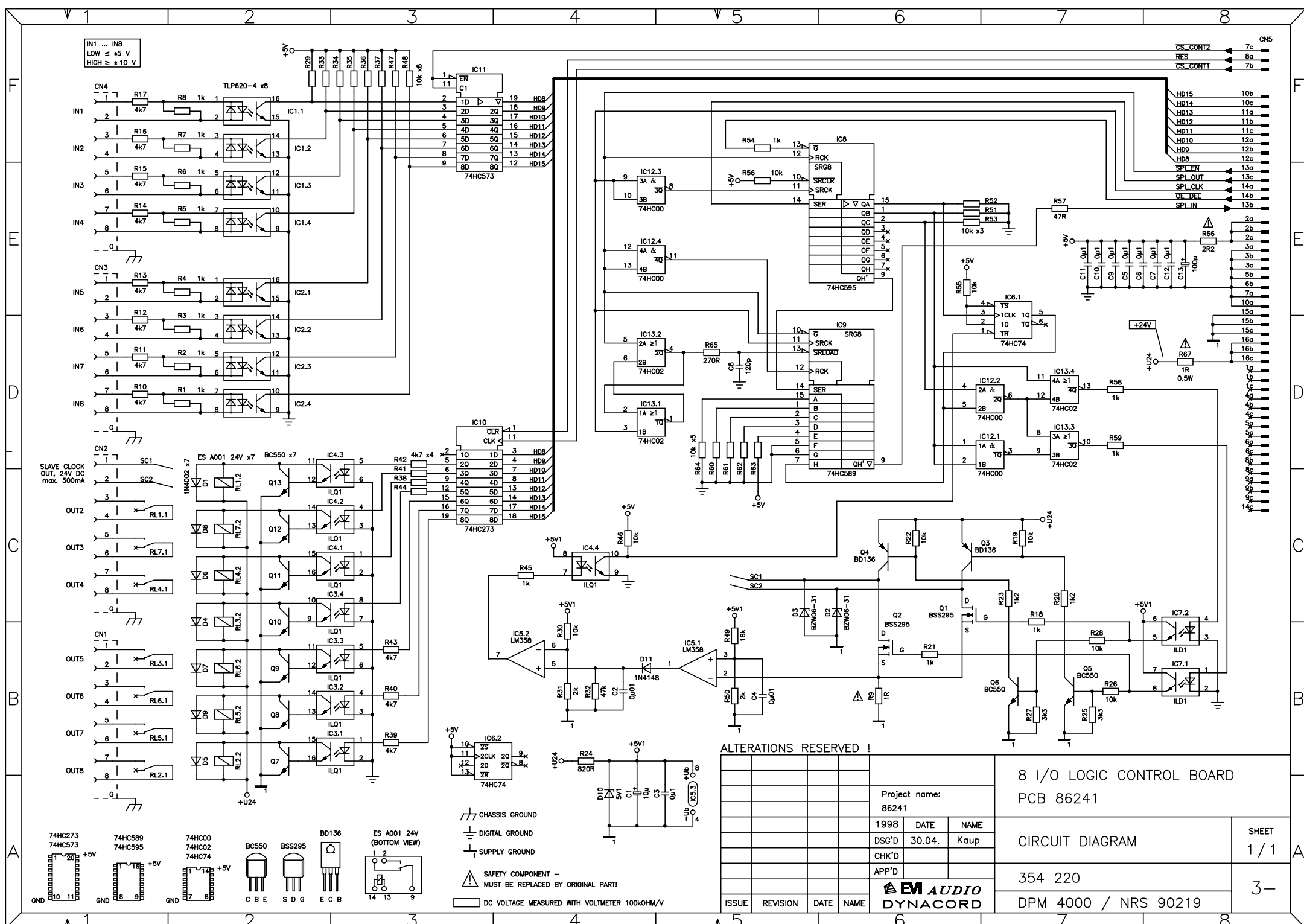




* not fitted

ALTERATIONS RESERVED !

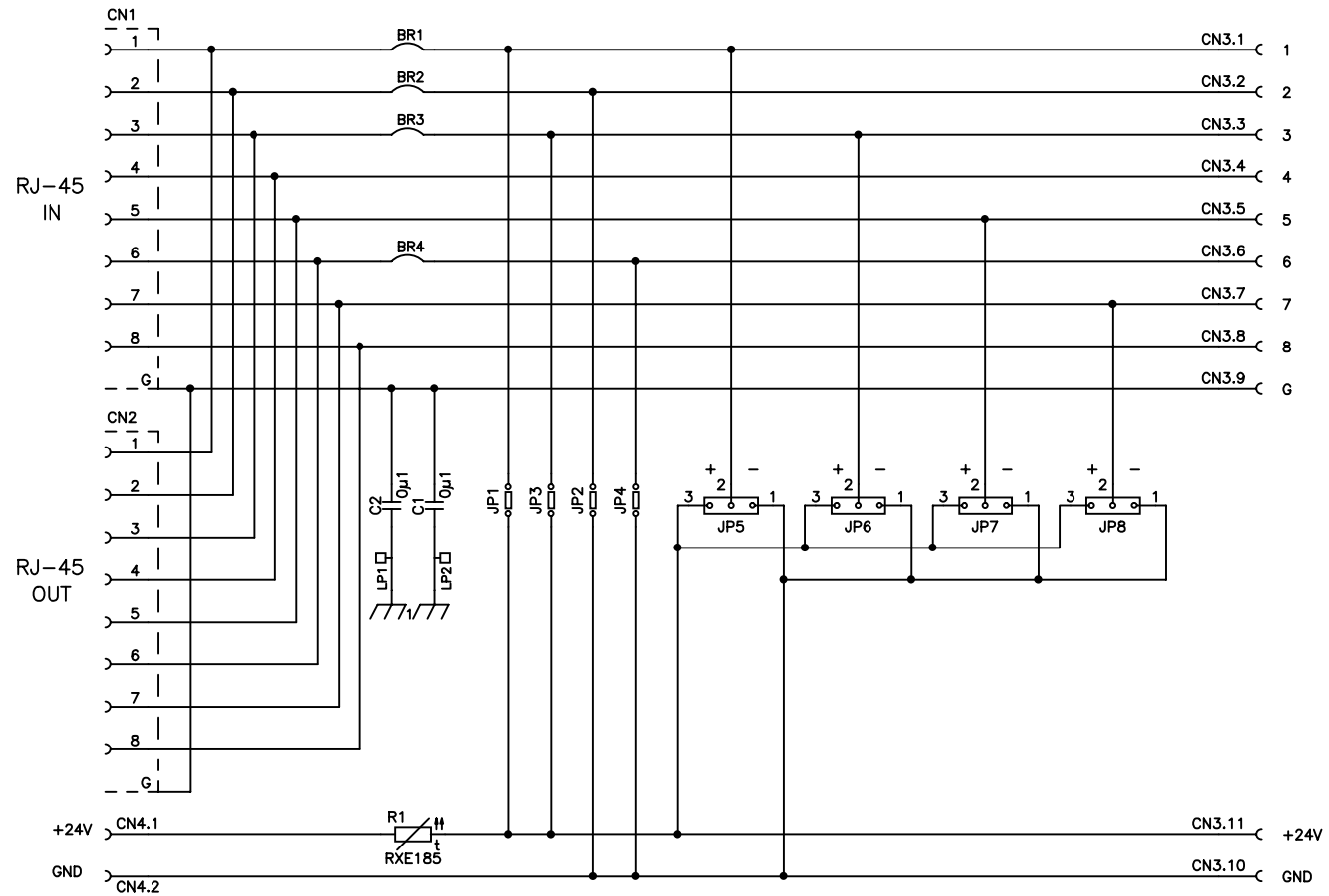
				Last saved: 1999-11-02 07:38			Master/Slave-Interface DPM4000 83116		
				Project name: 83116					
				1999	DATE	NAME			
				DSG'D	14.10.	Wendler	CIRCUIT DIAGRAM		SHEET 1 / 1
				CHK'D					
				APP'D					
							357094		4-
ISSUE	REVISION	DATE	NAME				NRS90241		





PIN ASSIGNMENT					
CPA2000 EPS205	LOGIC OUTPUTS	LOGIC INPUTS	REMOTE INTERFACE	DPC INTERFACE	NRS90241
+24V	OUT1a	IN1a	+24V	+24V	—
GND	OUT1b	IN1b	GND	GND	—
SP_IN	OUT2a	IN2a	(+24V)	(+24V)	—
RS485+	OUT2b	IN2b	RS485+	RS485+	RS485+
RS485-	OUT3a	IN3a	RS485-	RS485-	RS485-
PTT	OUT3b	IN3b	(GND)	(GND)	—
AUDIO+	OUT4a	IN4a	AUDIO+	AUDIO+	—
AUDIO-	OUT4b	IN4b	AUDIO-	AUDIO-	—

if power supply via CN4:
 BR1-4 open
 JP1 - JP4 closed
 JP5 - JP8 only used for logic inputs



ALTERATIONS RESERVED !

				RJ45-Terminalboard		
				Project name: 86244b		
				DATE	NAME	
				DSG'D	12.12.	Wendler
C	39/00	21/01	WWE	CHK'D	28.01.	Wendler
B	15/98	17/03	WWE	APP'D	28.01.	Wendler
A	1998	28/01	WWE			SHEET 1 / 1
ISSUE	REVISION	DATE	NAME			4 -

121619 DPM 4000 DIGIT.PAG.MANAGER

Reference	Artikel-nummer	Artikelbezeichnung	Description
	355018	BEDIENUNGSANL. PROMATRIX	owner's manual
	354591	BUCHSENLEISTE 11POL	connector female 11-pin
	355656	BESCHRIFTUNGSBLATT DPC	label
	353111	KABEL-KONFEKT 10POL 0.230M	ribbon cable 10-way
	355017	EINLEGEFOLIE DPM 4000	mylar window
	353105	KRT. 2 HE "DY." 556X507X178	carton
	349568	STYROPOR-EINLAGE 2 HE 86MM	carton filler
	337053	SCHUTZHÜLLE 650X800X0,07	poly bag
	353711	FB.DPM 4000 BED	front panel DPM 4000
	353724	DEC.DPM 4000	chassis top cover
	355014	BLEND.NR90218 BED	front panel NR9018
	355016	BLEND.NR90219 BED	front panel NR90219
	804298	PCB--#DPM4000	pcb assy 80429
BT201	354042	BATTERIE-LITHIUM 3V	battery back up
CN201	344975	MESSERLST. 10POL	connector male 10-pin
CN301	341600	STIFTLEISTE 2X10POL	connector male 20-pin
CN302	341600	STIFTLEISTE 2X10POL	connector male 20-pin
CN303	341600	STIFTLEISTE 2X10POL	connector male 20-pin
CN304	341600	STIFTLEISTE 2X10POL	connector male 20-pin
CN401	352159	FEDERLEISTE 32POL V42254-B2	connector female 32-pole
CN402	352159	FEDERLEISTE 32POL V42254-B2	connector female 32-pole
CN403	352159	FEDERLEISTE 32POL V42254-B2	connector female 32-pole
CN404	352159	FEDERLEISTE 32POL V42254-B2	connector female 32-pole
CN405	352199	FEDERLEISTE 48POL V42254-B2	connector female 48-pole
C0213	343532	KO-EL 100.000MF 25V	cap electrolytic 100uF/25V
C0214	356508	KO-KER 0.10MF 50V 20%	cap ceramic 100nF
C0301	340988	KO-FOL 0.470MF 63V 5%	cap mylar 470nF
C0410	343532	KO-EL 100.000MF 25V	cap electrolytic 100uF/25V
C0411	335909	KO-EL 220.000MF 50V	cap electrolytic 220uF/50V
D0101	351469	LED RT 3MM LS 3369-EH	led red
D0102	351469	LED RT 3MM LS 3369-EH	led red
L0401	339139	FERRITPERLE EXC-ELDR35C	ferrite bead inductor
X0101	349128	QUARZ 40.0000KHZ MTF 40	crystal 40 khz
X0201	354376	QUARZ 3.6864MHZ HC-49-U	crystal 3.6864 mhz
X0202	354041	QUARZ 32.7680KHZ MTF 32	crystal 32.768 khz
X0301	348962	QUARZ-OSZIL. 12.2880MHZ	crystal 12.288 mhz
	804308	PCB+A#DPM4000	pcb assy interface
CN101	354038	BUCHSE-MODULAR 8POL	connector female 8-pin
CN201	352115	BUCHSE-SUB-D 9POL	connector female 9-pole
CN202	354421	STIFTLEISTE 11POL MC1.5/11	connector male 11-pin
CN203	348802	MESSERLST. 12POL	connector male 12-pin
CN301	354420	STIFTLEISTE 2X25POL 5-	connector 50-pin
CN302	340636	FL.STECKER 6.3/0.8	connector 6.3mm faston
CN303	340636	FL.STECKER 6.3/0.8	connector 6.3mm faston
C0101	301530	KO-KER 100.0PF 500V 10%	cap ceramic 100pF
C0102	301530	KO-KER 100.0PF 500V 10%	cap ceramic 100pF
C0103	301453	KO-EL 1.000MF 50V	cap electrolytic 1uF/50V
C0104	329021	KO-KER 0.10MF 100V 20%	cap ceramic 100nF

Ersatzteilliste

Reference	Artikel-nummer	Artikelbezeichnung	Description
C0105	340523	KO-EL 22.000MF 16V	cap electrolytic 22uF/16V
C0106	329021	KO-KER 0.10MF 100V 20%	cap ceramic 100nF
C0107	340523	KO-EL 22.000MF 16V	cap electrolytic 22uF/16V
C0108	301530	KO-KER 100.0PF 500V 10%	cap ceramic 100pF
C0109	301530	KO-KER 100.0PF 500V 10%	cap ceramic 100pF
C0110	301453	KO-EL 1.000MF 50V	cap electrolytic 1uF/50V
C0111	301453	KO-EL 1.000MF 50V	cap electrolytic 1uF/50V
C0112	301530	KO-KER 100.0PF 500V 10%	cap ceramic 100pF
C0113	301453	KO-EL 1.000MF 50V	cap electrolytic 1uF/50V
C0114	329021	KO-KER 0.10MF 100V 20%	cap ceramic 100nF
C0115	301530	KO-KER 100.0PF 500V 10%	cap ceramic 100pF
C0116	329021	KO-KER 0.10MF 100V 20%	cap ceramic 100nF
C0117	332962	KO-EL 470.000MF 25V	cap electrolytic 470uF/25V
C0118	333249	KO-EL 0.330MF 50V	cap electrolytic 0.33uF/50V
C0119	301530	KO-KER 100.0PF 500V 10%	cap ceramic 100pF
C0120	301453	KO-EL 1.000MF 50V	cap electrolytic 1uF/50V
C0121	329021	KO-KER 0.10MF 100V 20%	cap ceramic 100nF
C0122	329021	KO-KER 0.10MF 100V 20%	cap ceramic 100nF
C0123	329021	KO-KER 0.10MF 100V 20%	cap ceramic 100nF
C0124	329021	KO-KER 0.10MF 100V 20%	cap ceramic 100nF
C0125	351994	KO-KER 120.0PF 500V 2%	cap ceramic 120pF
C0126	327366	KO-EL 4.700MF 50V BIP	cap electrolytic 4.7uF/50V
C0127	337181	KO-FOL 0.010MF 100V 5%	cap mylar 10nF
C0128	301472	KO-EL 10.000MF 63V	cap electrolytic 10uF/63V
C0129	329021	KO-KER 0.10MF 100V 20%	cap ceramic 100nF
C0130	301472	KO-EL 10.000MF 63V	cap electrolytic 10uF/63V
C0131	329021	KO-KER 0.10MF 100V 20%	cap ceramic 100nF
C0132	329021	KO-KER 0.10MF 100V 20%	cap ceramic 100nF
C0133	329021	KO-KER 0.10MF 100V 20%	cap ceramic 100nF
C0134	329021	KO-KER 0.10MF 100V 20%	cap ceramic 100nF
C0135	329021	KO-KER 0.10MF 100V 20%	cap ceramic 100nF
C0136	329021	KO-KER 0.10MF 100V 20%	cap ceramic 100nF
C0137	329021	KO-KER 0.10MF 100V 20%	cap ceramic 100nF
C0138	301530	KO-KER 100.0PF 500V 10%	cap ceramic 100pF
C0139	343533	KO-EL 220.000MF 25V	cap electrolytic 220uF/25V
C0140	340523	KO-EL 22.000MF 16V	cap electrolytic 22uF/16V
C0141	301538	KO-KER 220.0PF K 500V 10%	cap ceramic 220pF
C0142	301538	KO-KER 220.0PF K 500V 10%	cap ceramic 220pF
C0201	340520	KO-EL 1.000MF 50V	cap electrolytic 1uF/50V
C0202	340520	KO-EL 1.000MF 50V	cap electrolytic 1uF/50V
C0203	340520	KO-EL 1.000MF 50V	cap electrolytic 1uF/50V
C0204	340520	KO-EL 1.000MF 50V	cap electrolytic 1uF/50V
C0205	329021	KO-KER 0.10MF 100V 20%	cap ceramic 100nF
C0206	329021	KO-KER 0.10MF 100V 20%	cap ceramic 100nF
C0207	340523	KO-EL 22.000MF 16V	cap electrolytic 22uF/16V
C0208	342923	KO-FOL 0.220MF 63V 5%	cap mylar 220nF
C0209	327815	KO-EL 22.000MF 25V	cap electrolytic 22uF/25V
C0210	327815	KO-EL 22.000MF 25V	cap electrolytic 22uF/25V
C0211	340521	KO-EL 2.200MF 50V	cap electrolytic 2.2uF/50V
C0212	329021	KO-KER 0.10MF 100V 20%	cap ceramic 100nF
C0213	329021	KO-KER 0.10MF 100V 20%	cap ceramic 100nF
C0214	329021	KO-KER 0.10MF 100V 20%	cap ceramic 100nF
C0301	329021	KO-KER 0.10MF 100V 20%	cap ceramic 100nF

Ersatzteilliste

Reference	Artikel-nummer	Artikelbezeichnung	Description
C0302	329021	KO-KER 0.10MF 100V 20%	cap ceramic 100nF
C0303	329021	KO-KER 0.10MF 100V 20%	cap ceramic 100nF
C0304	329021	KO-KER 0.10MF 100V 20%	cap ceramic 100nF
C0305	330819	KO-EL 470.000MF 50V	cap electrolytic 470uF/50V
C0306	330819	KO-EL 470.000MF 50V	cap electrolytic 470uF/50V
C0307	301491	KO-EL 100.000MF 50V	cap electrolytic 100uF/50V
C0308	342934	KO-FOL 0.033MF 100V 5%	cap mylar 33nF
C0309	301566	KO-KER 2200.0PF 100V 10%	cap ceramic 2200pF
C0310	306008	KO-KER 4700.0PF K 100V 10%	cap ceramic 4,7nF
C0311	301546	KO-KER 470.0PF 500V 10%	cap ceramic 470pF
C0312	340522	KO-EL 10.000MF 35V	cap electrolytic 10uF/35
C0313	329021	KO-KER 0.10MF 100V 20%	cap ceramic 100nF
C0314	326924	KO-FOL 2200.000PF 100V 5%	cap mylar 2200pF
C0315	329021	KO-KER 0.10MF 100V 20%	cap ceramic 100nF
C0316	340522	KO-EL 10.000MF 35V	cap electrolytic 10uF/35
C0317	336095	KO-FOL 0.100MF 63V 5%	cap mylar 100nF
C0318	343533	KO-EL 220.000MF 25V	cap electrolytic 220uF/25V
C0319	343533	KO-EL 220.000MF 25V	cap electrolytic 220uF/25V
C0320	343533	KO-EL 220.000MF 25V	cap electrolytic 220uF/25V
C0321	343533	KO-EL 220.000MF 25V	cap electrolytic 220uF/25V
C0322	329021	KO-KER 0.10MF 100V 20%	cap ceramic 100nF
C0323	329021	KO-KER 0.10MF 100V 20%	cap ceramic 100nF
C0324	329021	KO-KER 0.10MF 100V 20%	cap ceramic 100nF
C0325	329021	KO-KER 0.10MF 100V 20%	cap ceramic 100nF
C0326	337181	KO-FOL 0.010MF 100V 5%	cap mylar 10nF
C0327	330819	KO-EL 470.000MF 50V	cap electrolytic 470uF/50V
C0328	330819	KO-EL 470.000MF 50V	cap electrolytic 470uF/50V
C0329	330819	KO-EL 470.000MF 50V	cap electrolytic 470uF/50V
C0330	343534	KO-EL 1000.000MF 16V	cap electrolytic 1000uF/16V
C0331	329021	KO-KER 0.10MF 100V 20%	cap ceramic 100nF
C0332	335909	KO-EL 220.000MF 50V	cap electrolytic 220uF/50V
C0333	335909	KO-EL 220.000MF 50V	cap electrolytic 220uF/50V
C0334	329021	KO-KER 0.10MF 100V 20%	cap ceramic 100nF
C0335	343532	KO-EL 100.000MF 25V	cap electrolytic 100uF/25V
C0336	343532	KO-EL 100.000MF 25V	cap electrolytic 100uF/25V
D0101	328788	DIODZ ZPD 5V1 0.50W	diode zener ZPD 5V1
D0102	328788	DIODZ ZPD 5V1 0.50W	diode zener ZPD 5V1
D0103	301297	DIODE BAT 85	diode BAT 85
D0104	301297	DIODE BAT 85	diode BAT 85
D0105	304360	DIODE 1N 4007 GEGURTET	diode 1N 4002
D0106	301254	DIODE 1N 4148 AXIAL	diode 1N 4148
D0107	301254	DIODE 1N 4148 AXIAL	diode 1N 4148
D0108	304360	DIODE 1N 4007 GEGURTET	diode 1N 4002
D0201	328788	DIODZ ZPD 5V1 0.50W	diode zener ZPD 5V1
D0202	328788	DIODZ ZPD 5V1 0.50W	diode zener ZPD 5V1
D0203	301254	DIODE 1N 4148 AXIAL	diode 1N 4148
D0204	301254	DIODE 1N 4148 AXIAL	diode 1N 4148
D0205	304360	DIODE 1N 4007 GEGURTET	diode 1N 4002
D0206	301254	DIODE 1N 4148 AXIAL	diode 1N 4148
D0207	301254	DIODE 1N 4148 AXIAL	diode 1N 4148
D0301	328769	DIODE MR 752	diode MR 752
D0302	308455	DIODE 1N 5401 OD. 1N 5402	diode 1N 5401
D0303	329969	DIODE BYW 96 D	diode BYW 96 D

Ersatzteilliste

Reference	Artikel-nummer	Artikelbezeichnung	Description
D0304	329969	DIODE BYW 96 D	diode BYW 96 D
D0305	301254	DIODE 1N 4148 AXIAL	diode 1N 4148
D0306	301254	DIODE 1N 4148 AXIAL	diode 1N 4148
D0307	351525	IC SPNG.REG. TL 431 ACLP	IC TL 431 voltage reg.
D0308	329968	DIODE BYV 96 D	diode BYV 96 D
D0309	329968	DIODE BYV 96 D	diode BYV 96 D
00010	340623	DIODE MUR 840	diode MUR 840
D0311	329968	DIODE BYV 96 D	diode BYV 96 D
FL101	346765	KO-SO MTB 271 KB FILTER	safety component
FL102	346765	KO-SO MTB 271 KB FILTER	safety component
FL103	346765	KO-SO MTB 271 KB FILTER	safety component
FL104	346765	KO-SO MTB 271 KB FILTER	safety component
FL105	346765	KO-SO MTB 271 KB FILTER	safety component
FL106	346765	KO-SO MTB 271 KB FILTER	safety component
FL201	346765	KO-SO MTB 271 KB FILTER	safety component
FL202	346765	KO-SO MTB 271 KB FILTER	safety component
FL203	343489	KO-SO MTY 223 NB FILTER	safety component
F0301	302573	SICHER T 6.3 A 250V	fuse 6.3A slow blow
F0302	302573	SICHER T 6.3 A 250V	fuse 6.3A slow blow
F0303	302585	SICHER T 2 A 250V	fuse 2A slow blow
IC101	327197	IC NE 5532 P 2FACH OP	IC NE 5532 N
IC102	354377	IC LM 1972 N 2CH.AUDIO	IC LM 1972
IC103	331340	IC TL 072 CP 2FACH OP	IC TL 072 CP
IC104	327197	IC NE 5532 P 2FACH OP	IC NE 5532 N
IC106	354175	IC SN 75176 BP RS 485	IC SN 75176
IC107	331928	IC MC 74 HC595 AN	IC MC 74 HC595
IC108	352160	IC MC 74 HC589 N	IC MC 74 HC589
IC109	331921	IC MC 74 HC 02 N	IC MC 74 HC 02 N
IC110	352106	IC ILQ 1 4FACH	IC ILQ 1
IC111	333268	IC MC 14556 BCP DUAL 1 TO 4	IC MC 14556
IC112	354339	IC MC 14175 BCP 4 FACH	IC MC 14175
IC113	354392	IC TLE 2082 CP DUAL OP	IC TLE 2082
IC114	354340	IC SPNG.REG. MC 79L15 ACP	IC MC 79L15 voltage reg.
IC115	352106	IC ILQ 1 4FACH	IC ILQ 1
IC116	333739	IC PC 900 OPTOKOPPLER	IC PC 900
IC117	333739	IC PC 900 OPTOKOPPLER	IC PC 900
IC201	352105	IC MAX 232 CPE	IC MAX 232
IC202	352194	IC TLP 620-4 OPTOKOPPLER	IC TLP 620-4
IC203	342874	IC LM 358 P 2FACH OP	IC LM 358P
IC204	342874	IC LM 358 P 2FACH OP	IC LM 358P
IC205	331340	IC TL 072 CP 2FACH OP	IC TL 072 CP
IC206	333458	IC MC 74 HC 14 AN	IC MC 74 HC 14
00010	309720	IC SPNG.REG. UC 7812 CKC	IC UC 7812 CKC
00010	337596	IC SPNG.REG. LM 7912 CT	IC MC 7912 CT
IC303	351699	IC UC 3844 N	IC UC 3844 N
IC304	331869	IC CNY 17-2 OPTOKOPPLER	IC CNY 17-2
IC305	331869	IC CNY 17-2 OPTOKOPPLER	IC CNY 17-2
JP101	327779	STIFTLEISTE 3POL STL 11 S	connector male 3-pin
JP102	327779	STIFTLEISTE 3POL STL 11 S	connector male 3-pin
JP103	327779	STIFTLEISTE 3POL STL 11 S	connector male 3-pin
JS101	332353	BUCHSE-KOAXIAL-STEREO	phone jack stereo
L0301	333717	DROSSEL 47.00UH/5.50A	coil 47 uH/5,5A
L0302	333717	DROSSEL 47.00UH/5.50A	coil 47 uH/5,5A

Ersatzteilliste

Reference	Artikel-nummer	Artikelbezeichnung	Description
L0303	333717	DROSSEL 47.00UH/5.50A	coil 47 uH/5,5A
L0304	354202	DROSSEL 47.00UH/1.10A	inductor 47uH/1.1A
L0305	335966	DROSSEL 47.00UH/0.45A	coil 47 uH
L0306	339139	FERRITPERLE EXC-ELDR35C	ferrite bead inductor
L0307	339139	FERRITPERLE EXC-ELDR35C	ferrite bead inductor
L0308	333717	DROSSEL 47.00UH/5.50A	coil 47 UH/5,5A
L0309	333717	DROSSEL 47.00UH/5.50A	coil 47 UH/5,5A
L0310	335966	DROSSEL 47.00UH/0.45A	coil 47 UH
L0311	339139	FERRITPERLE EXC-ELDR35C	ferrite bead inductor
Q0101	301184	TRANS BC 550 C	transistor BC 550 B
00010	354660	TRANS RFD 15P05 P-CHANN	transistor RFD 15P05
Q0103	301184	TRANS BC 550 C	transistor BC 550 B
Q0201	301184	TRANS BC 550 C	transistor BC 550 B
Q0202	301184	TRANS BC 550 C	transistor BC 550 B
00010	335965	TRANS BUZ 72 A SIP 3 TECHN.	trans. BUZ 72 A
RL101	356745	RELAIS M4-24H	relay 24V
RL201	339849	RELAIS MZ-24 HG-K	relay 24V
RN101	343457	DICKS-NETZW. 8PIN 2%	res.network 8x10k
R0119	340643	WI-SI 1.00 OHM 0.35W 5%	safety resistor 1 ohm
R0123	301674	WI-SCH 10.00 OHM 2.00W 5%	resistor 10 ohm 2watt
R0124	301674	WI-SCH 10.00 OHM 2.00W 5%	resistor 10 ohm 2watt
00010	352304	SICHER R 750 MA 60V	fuse resistor
R0307	354644	WI-DR 0.15 OHM 4.00W 5%	resistor 0.15 ohm/4watt
T0301	354415	SNT-TRAFO DC/DC WANDLER	transformer
VR301	348487	WI-TRI 4.70 KOHM LIN	pot trim 4.7k Ohm lin
00040	332452	KODIERBRÜCKE 330.0101 SW	shorting plug
00050	303576	SICHER-HALTE-FEDER	fuse clip
862428 PCBSB:DPM4000			
CN001	344975	MESSERLST. 10POL	connector male 10-pin
C0001	340522	KO-EL 10.000MF 35V	cap electrolytic 10uF/35
C0002	329021	KO-KER 0.10MF 100V 20%	cap ceramic 100nF
D0001	336398	LED GN 3MM TLHG 4400/01	LED green 3mm
D0002	336398	LED GN 3MM TLHG 4400/01	LED green 3mm
D0003	336398	LED GN 3MM TLHG 4400/01	LED green 3mm
D0004	336399	LED RT 3MM TLUR 4401	LED red 3mm
822228 PCBSA#DPM4000			
CN001	352158	MESSERLST. 32POL	connector male 32-pin
C0001	329021	KO-KER 0.10MF 100V 20%	cap ceramic 100nF
C0002	343532	KO-EL 100.000MF 25V	cap electrolytic 100uF/25V
C0003	343532	KO-EL 100.000MF 25V	cap electrolytic 100uF/25V
C0004	343532	KO-EL 100.000MF 25V	cap electrolytic 100uF/25V
C0005	343532	KO-EL 100.000MF 25V	cap electrolytic 100uF/25V
C0006	329021	KO-KER 0.10MF 100V 20%	cap ceramic 100nF
C0007	329021	KO-KER 0.10MF 100V 20%	cap ceramic 100nF
C0008	301472	KO-EL 10.000MF 63V	cap electrolytic 10uF/63V
C0009	301524	KO-KER 47.0PF 500V 10%	cap ceramic 47pF
C0010	329021	KO-KER 0.10MF 100V 20%	cap ceramic 100nF
C0011	301524	KO-KER 47.0PF 500V 10%	cap ceramic 47pF
C0012	301472	KO-EL 10.000MF 63V	cap electrolytic 10uF/63V
C0013	301524	KO-KER 47.0PF 500V 10%	cap ceramic 47pF
C0014	329021	KO-KER 0.10MF 100V 20%	cap ceramic 100nF

Ersatzteilliste

Reference	Artikel-nummer	Artikelbezeichnung	Description
C0015	301524	KO-KER 47.0PF 500V 10%	cap ceramic 47pF
C0016	301472	KO-EL 10.000MF 63V	cap electrolytic 10uF/63V
C0017	329021	KO-KER 0.10MF 100V 20%	cap ceramic 100nF
C0018	301472	KO-EL 10.000MF 63V	cap electrolytic 10uF/63V
C0019	329021	KO-KER 0.10MF 100V 20%	cap ceramic 100nF
C0020	301472	KO-EL 10.000MF 63V	cap electrolytic 10uF/63V
C0021	301472	KO-EL 10.000MF 63V	cap electrolytic 10uF/63V
C0022	301524	KO-KER 47.0PF 500V 10%	cap ceramic 47pF
C0023	329021	KO-KER 0.10MF 100V 20%	cap ceramic 100nF
C0024	301524	KO-KER 47.0PF 500V 10%	cap ceramic 47pF
C0025	329021	KO-KER 0.10MF 100V 20%	cap ceramic 100nF
C0026	301472	KO-EL 10.000MF 63V	cap electrolytic 10uF/63V
C0027	301472	KO-EL 10.000MF 63V	cap electrolytic 10uF/63V
C0028	340524	KO-EL 100.000MF 16V	cap electrolytic 100uF/16V
C0029	337181	KO-FOL 0.010MF 100V 5%	cap mylar 10nF
C0030	329021	KO-KER 0.10MF 100V 20%	cap ceramic 100nF
C0031	329021	KO-KER 0.10MF 100V 20%	cap ceramic 100nF
C0032	340522	KO-EL 10.000MF 35V	cap electrolytic 10uF/35
C0033	301478	KO-EL 22.000MF 63V	cap electrolytic 22uF/63V
C0034	329021	KO-KER 0.10MF 100V 20%	cap ceramic 100nF
C0035	340522	KO-EL 10.000MF 35V	cap electrolytic 10uF/35
C0036	329021	KO-KER 0.10MF 100V 20%	cap ceramic 100nF
C0037	329021	KO-KER 0.10MF 100V 20%	cap ceramic 100nF
C0038	329021	KO-KER 0.10MF 100V 20%	cap ceramic 100nF
C0039	329021	KO-KER 0.10MF 100V 20%	cap ceramic 100nF
C0040	301478	KO-EL 22.000MF 63V	cap electrolytic 22uF/63V
C0041	301478	KO-EL 22.000MF 63V	cap electrolytic 22uF/63V
C0042	351994	KO-KER 120.0PF 500V 2%	cap ceramic 120pF
C0043	329021	KO-KER 0.10MF 100V 20%	cap ceramic 100nF
C0044	301478	KO-EL 22.000MF 63V	cap electrolytic 22uF/63V
D0001	304360	DIODE 1N 4007 GEGURTET	diode 1N 4002
D0002	304360	DIODE 1N 4007 GEGURTET	diode 1N 4002
D0003	301297	DIODE BAT 85	diode BAT 85
D0004	301297	DIODE BAT 85	diode BAT 85
D0005	301297	DIODE BAT 85	diode BAT 85
D0006	301297	DIODE BAT 85	diode BAT 85
FL001	346765	KO-SO MTB 271 KB FILTER	safety component
FL002	346765	KO-SO MTB 271 KB FILTER	safety component
FL003	346765	KO-SO MTB 271 KB FILTER	safety component
FL004	346765	KO-SO MTB 271 KB FILTER	safety component
FL005	343489	KO-SO MTY 223 NB FILTER	safety component
IC001	327197	IC NE 5532 P 2FACH OP	IC NE 5532 N
IC002	327197	IC NE 5532 P 2FACH OP	IC NE 5532 N
IC003	327197	IC NE 5532 P 2FACH OP	IC NE 5532 N
IC004	331332	IC DG 211 CJ	IC DG 211 CJ
IC005	354350	IC ILD 1 2FACH	IC ILD 1
IC007	346343	IC SPNG.REG. MC 78L05 ACP	IC MC 78 L 05 ACP
IC008	331928	IC MC 74 HC595 AN	IC MC 74 HC595
IC009	331917	IC MC 74 HC 08 AN	IC MC 74 HC 08 N
IC010	352160	IC MC 74 HC589 N	IC MC 74 HC589
IC011	331921	IC MC 74 HC 02 N	IC MC 74 HC 02 N
JP001	340578	STIFTLEISTE 2X 2POL CSU	connector male 4-pin
JP002	340578	STIFTLEISTE 2X 2POL CSU	connector male 4-pin

Ersatzteilliste

Reference	Artikel-nummer	Artikelbezeichnung	Description
JS001	351816	STECKER-FL. XLR 3POL PRINTB	xlr connector male 3-pin
JS002	351816	STECKER-FL. XLR 3POL PRINTB	xlr connector male 3-pin
Q0001	301184	TRANS BC 550 C	transistor BC 550 B
Q0002	301184	TRANS BC 550 C	transistor BC 550 B
RL001	356745	RELAIS M4-24H	relay 24V
RL002	356745	RELAIS M4-24H	relay 24V
RN001	354772	DICKS-NETZW. RMLA 4 103F	resistor network 4x10k
RN002	354772	DICKS-NETZW. RMLA 4 103F	resistor network 4x10k
RN003	354772	DICKS-NETZW. RMLA 4 103F	resistor network 4x10k
RN004	354772	DICKS-NETZW. RMLA 4 103F	resistor network 4x10k
R0046	340299	WI-SI 2.20 OHM 0.30W 5%	safety resistor 2.20 Ohm
R0049	340299	WI-SI 2.20 OHM 0.30W 5%	safety resistor 2.20 Ohm
R0050	340299	WI-SI 2.20 OHM 0.30W 5%	safety resistor 2.20 Ohm
R0051	340299	WI-SI 2.20 OHM 0.30W 5%	safety resistor 2.20 Ohm
00030	332452	KODIERBRÜCKE 330.0101 SW	shorting plug
862418 PCB-A#DPM4000			
CN001	354038	BUCHSE-MODULAR 8POL	connector female 8-pin
CN002	354038	BUCHSE-MODULAR 8POL	connector female 8-pin
CN003	354038	BUCHSE-MODULAR 8POL	connector female 8-pin
CN004	354038	BUCHSE-MODULAR 8POL	connector female 8-pin
CN005	352198	MESSERLST. 48POL	connector male 48-pin
C0001	301472	KO-EL 10.000MF 63V	cap electrolytic 10uF/63V
C0002	301472	KO-EL 10.000MF 63V	cap electrolytic 10uF/63V
C0003	329021	KO-KER 0.10MF 100V 20%	cap ceramic 100nF
C0005	329021	KO-KER 0.10MF 100V 20%	cap ceramic 100nF
C0006	329021	KO-KER 0.10MF 100V 20%	cap ceramic 100nF
C0007	329021	KO-KER 0.10MF 100V 20%	cap ceramic 100nF
C0008	306005	KO-KER 120.0PF K 500V 10%	cap ceramic 120pF
C0009	329021	KO-KER 0.10MF 100V 20%	cap ceramic 100nF
C0010	329021	KO-KER 0.10MF 100V 20%	cap ceramic 100nF
C0011	329021	KO-KER 0.10MF 100V 20%	cap ceramic 100nF
C0012	329021	KO-KER 0.10MF 100V 20%	cap ceramic 100nF
C0013	343532	KO-EL 100.000MF 25V	cap electrolytic 100uF/25V
D0001	304360	DIODE 1N 4007 GEGURTET	diode 1N 4002
D0002	354570	DIODZ BZW 06-31 TRANSIL	diode zener BZW 06-31
D0003	354570	DIODZ BZW 06-31 TRANSIL	diode zener BZW 06-31
D0004	304360	DIODE 1N 4007 GEGURTET	diode 1N 4002
D0005	304360	DIODE 1N 4007 GEGURTET	diode 1N 4002
D0006	304360	DIODE 1N 4007 GEGURTET	diode 1N 4002
D0007	304360	DIODE 1N 4007 GEGURTET	diode 1N 4002
D0008	304360	DIODE 1N 4007 GEGURTET	diode 1N 4002
D0009	304360	DIODE 1N 4007 GEGURTET	diode 1N 4002
D0010	301254	DIODE 1N 4148 AXIAL	diode 1N 4148
D0011	301254	DIODE 1N 4148 AXIAL	diode 1N 4148
D0012	301254	DIODE 1N 4148 AXIAL	diode 1N 4148
D0013	301254	DIODE 1N 4148 AXIAL	diode 1N 4148
D0014	301254	DIODE 1N 4148 AXIAL	diode 1N 4148
D0015	301254	DIODE 1N 4148 AXIAL	diode 1N 4148
D0016	309450	DIODZ BZX 55C 15V 0.50W	diode zener 15V
D0017	309450	DIODZ BZX 55C 15V 0.50W	diode zener 15V
IC001	352194	IC TLP 620-4 OPTOKOPPLER	IC TLP 620-4
IC002	352194	IC TLP 620-4 OPTOKOPPLER	IC TLP 620-4

Ersatzteilliste

Reference	Artikel- nummer	Artikelbezeichnung	Description
IC003	352106	IC ILQ 1 4FACH	IC ILQ 1
IC004	352106	IC ILQ 1 4FACH	IC ILQ 1
IC006	339704	IC MC 74 HC 74 N	IC MC 74 HC 74 N
IC007	354350	IC ILD 1 2FACH	IC ILD 1
IC008	331928	IC MC 74 HC595 AN	IC MC 74 HC595
IC009	352160	IC MC 74 HC589 N	IC MC 74 HC589
IC010	354439	IC SN 74 HC273 N OCTAL	IC SN 74 HC273 N
IC011	341636	IC SN 74 HC573 N	IC SN 74 HC573 N
IC012	331920	IC MC 74 HC 00 N	IC MC 74 HC 00 N
IC013	331921	IC MC 74 HC 02 N	IC MC 74 HC 02 N
00010	301257	TRANS BD 135-10 SOT-32	transistor BD 135-10
00010	301257	TRANS BD 135-10 SOT-32	transistor BD 135-10
00010	301256	TRANS BD 136-10 SOT-32	trans. BD 136-10
00010	301256	TRANS BD 136-10 SOT-32	trans. BD 136-10
Q0005	301184	TRANS BC 550 C	transistor BC 550 B
Q0006	301184	TRANS BC 550 C	transistor BC 550 B
Q0007	301184	TRANS BC 550 C	transistor BC 550 B
Q0008	301184	TRANS BC 550 C	transistor BC 550 B
Q0009	301184	TRANS BC 550 C	transistor BC 550 B
Q0010	301184	TRANS BC 550 C	transistor BC 550 B
Q0011	301184	TRANS BC 550 C	transistor BC 550 B
Q0012	301184	TRANS BC 550 C	transistor BC 550 B
Q0013	301184	TRANS BC 550 C	transistor BC 550 B
Q0014	301184	TRANS BC 550 C	transistor BC 550 B
Q0015	301184	TRANS BC 550 C	transistor BC 550 B
Q0016	301184	TRANS BC 550 C	transistor BC 550 B
Q0017	301184	TRANS BC 550 C	transistor BC 550 B
RL001	339849	RELAIS MZ-24 HG-K	relay ES HA 001 24
RL002	339849	RELAIS MZ-24 HG-K	relay ES HA 001 24
RL003	339849	RELAIS MZ-24 HG-K	relay ES HA 001 24
RL004	339849	RELAIS MZ-24 HG-K	relay ES HA 001 24
RL005	339849	RELAIS MZ-24 HG-K	relay ES HA 001 24
RL006	339849	RELAIS MZ-24 HG-K	relay ES HA 001 24
RL007	339849	RELAIS MZ-24 HG-K	relay ES HA 001 24
R0066	340299	WI-SI 2.20 OHM 0.30W 5%	safety resistor 2.20 Ohm
R0067	351669	WI-SI 1.00 OHM 0.50W 5%	safety resistor 1 ohm

Ersatzteilliste - Bill of Materials

121665		NRS 90215 2CH PAG CONS	
Pos. Nr.	Ref. Best. Nr.	Part	
No.	No.	Bezeichnung	Description

Verpackung		Packing material	
------------	--	------------------	--

355511	KRT. NRS 90215	260X100X50	carton
347529	SCHUTZBEUTEL	127X305	poly bag

Mechanische Teile		Cabinet material	
-------------------	--	------------------	--

355012	BLLENDE-BED	NRS 90215	front panel
--------	-------------	-----------	-------------

813328		PCBSAR#DPM4000		pcb assy 81332
--------	--	----------------	--	----------------

CN001	354038	BUCHSE-MODULAR	8POL	connector female 8-pin
CN002	354038	BUCHSE-MODULAR	8POL	connector female 8-pin
CN003	352158	MESSERLST.	32POL	connector male 32-pin
C0001	329021	KO-KER	0.10MF 100V 20%	cap ceramic 100nF
C0002	329021	KO-KER	0.10MF 100V 20%	cap ceramic 100nF
C0003	301524	KO-KER	47.0PF 500V 10%	cap ceramic 47pF
C0004	329021	KO-KER	0.10MF 100V 20%	cap ceramic 100nF
C0005	301524	KO-KER	47.0PF 500V 10%	cap ceramic 47pF
C0006	301530	KO-KER	100.0PF 500V 10%	cap ceramic 100pF
C0007	301530	KO-KER	100.0PF 500V 10%	cap ceramic 100pF
C0008	301530	KO-KER	100.0PF 500V 10%	cap ceramic 100pF
C0009	301530	KO-KER	100.0PF 500V 10%	cap ceramic 100pF
C0010	329021	KO-KER	0.10MF 100V 20%	cap ceramic 100nF
C0011	329021	KO-KER	0.10MF 100V 20%	cap ceramic 100nF
C0012	340522	KO-EL	10.000MF 35V	cap electrolytic 10uF/35
C0013	343532	KO-EL	100.000MF 25V	cap electrolytic 100uF/25V
C0014	340522	KO-EL	10.000MF 35V	cap electrolytic 10uF/35
C0015	343532	KO-EL	100.000MF 25V	cap electrolytic 100uF/25V
C0016	340522	KO-EL	10.000MF 35V	cap electrolytic 10uF/35
C0017	340522	KO-EL	10.000MF 35V	cap electrolytic 10uF/35
C0018	327366	KO-EL	4.700MF 50V BIP	cap electrolytic 4.7uF/50V
C0019	329021	KO-KER	0.10MF 100V 20%	cap ceramic 100nF
C0020	329021	KO-KER	0.10MF 100V 20%	cap ceramic 100nF
C0021	327366	KO-EL	4.700MF 50V BIP	cap electrolytic 4.7uF/50V
C0022	329021	KO-KER	0.10MF 100V 20%	cap ceramic 100nF
C0023	337181	KO-FOL	0.010MF 100V 5%	cap mylar 10nF
C0024	340522	KO-EL	10.000MF 35V	cap electrolytic 10uF/35
C0025	340522	KO-EL	10.000MF 35V	cap electrolytic 10uF/35
C0026	340522	KO-EL	10.000MF 35V	cap electrolytic 10uF/35
C0027	340522	KO-EL	10.000MF 35V	cap electrolytic 10uF/35
C0028	301530	KO-KER	100.0PF 500V 10%	cap ceramic 100pF
C0029	301530	KO-KER	100.0PF 500V 10%	cap ceramic 100pF
C0030	301538	KO-KER	220.0PF K 500V 10%	cap ceramic 220pF
C0031	301538	KO-KER	220.0PF K 500V 10%	cap ceramic 220pF
C0032	327393	KO-FOL	4700.000PF 63V 5%	cap mylar 4700pF
C0033	327393	KO-FOL	4700.000PF 63V 5%	cap mylar 4700pF
C0034	327393	KO-FOL	4700.000PF 63V 5%	cap mylar 4700pF
C0035	327393	KO-FOL	4700.000PF 63V 5%	cap mylar 4700pF

121665 NRS 90215 2CH PAG CONS					
Pos. Nr. Ref.	Best. Nr. Part				
No.	No.	Bezeichnung			Description
C0036	329021	KO-KER	0.10MF	100V 20%	cap ceramic 100nF
C0037	340524	KO-EL	100.000MF	16V	cap electrolytic 100uF/16V
C0038	329021	KO-KER	0.10MF	100V 20%	cap ceramic 100nF
C0039	340522	KO-EL	10.000MF	35V	cap electrolytic 10uF/35
C0040	329021	KO-KER	0.10MF	100V 20%	cap ceramic 100nF
C0041	329021	KO-KER	0.10MF	100V 20%	cap ceramic 100nF
C0042	340522	KO-EL	10.000MF	35V	cap electrolytic 10uF/35
C0043	340522	KO-EL	10.000MF	35V	cap electrolytic 10uF/35
C0044	329021	KO-KER	0.10MF	100V 20%	cap ceramic 100nF
C0045	329021	KO-KER	0.10MF	100V 20%	cap ceramic 100nF
C0046	329021	KO-KER	0.10MF	100V 20%	cap ceramic 100nF
C0047	329021	KO-KER	0.10MF	100V 20%	cap ceramic 100nF
C0048	340522	KO-EL	10.000MF	35V	cap electrolytic 10uF/35
C0049	301491	KO-EL	100.000MF	50V	cap electrolytic 100uF/50V
C0050	329021	KO-KER	0.10MF	100V 20%	cap ceramic 100nF
C0051	327815	KO-EL	22.000MF	25V	cap electrolytic 22uF/25V
C0052	329021	KO-KER	0.10MF	100V 20%	cap ceramic 100nF
C0053	351994	KO-KER	120.0PF	500V 2%	cap ceramic 120pF
C0054	329021	KO-KER	0.10MF	100V 20%	cap ceramic 100nF
C0055	329021	KO-KER	0.10MF	100V 20%	cap ceramic 100nF
C0056	301478	KO-EL	22.000MF	63V	cap electrolytic 22uF/63V
C0057	301478	KO-EL	22.000MF	63V	cap electrolytic 22uF/63V
C0058	329021	KO-KER	0.10MF	100V 20%	cap ceramic 100nF
C0059	329021	KO-KER	0.10MF	100V 20%	cap ceramic 100nF
C0060	301478	KO-EL	22.000MF	63V	cap electrolytic 22uF/63V
D0005	301254	DIODE 1N 4148	AXIAL		diode 1N 4148
D0006	301254	DIODE 1N 4148	AXIAL		diode 1N 4148
D0007	301254	DIODE 1N 4148	AXIAL		diode 1N 4148
D0008	301254	DIODE 1N 4148	AXIAL		diode 1N 4148
D0009	304360	DIODE 1N 4007	GEGURTET		diode 1N 4002
FL001	346765	KO-SO MTB 271 KB	FILTER		safety component
FL002	346765	KO-SO MTB 271 KB	FILTER		safety component
FL003	346765	KO-SO MTB 271 KB	FILTER		safety component
FL004	346765	KO-SO MTB 271 KB	FILTER		safety component
FL005	346765	KO-SO MTB 271 KB	FILTER		safety component
FL006	346765	KO-SO MTB 271 KB	FILTER		safety component
FL007	346765	KO-SO MTB 271 KB	FILTER		safety component
FL008	346765	KO-SO MTB 271 KB	FILTER		safety component
FL009	346765	KO-SO MTB 271 KB	FILTER		safety component
FL010	346765	KO-SO MTB 271 KB	FILTER		safety component
FL011	346765	KO-SO MTB 271 KB	FILTER		safety component
FL012	343489	KO-SO MTY 223 NB	FILTER		safety component
IC001	327197	IC NE 5532 P	2FACH OP		IC NE 5532 N
IC002	327197	IC NE 5532 P	2FACH OP		IC NE 5532 N
IC003	331332	IC DG 211 CJ			IC DG 211 CJ
IC004	354392	IC TLE 2082 CP	DUAL OP		IC TLE 2082
IC006	354339	IC MC 14175 BCP	4 FACH		IC MC 14175
IC007	354417	IC SPNG.REG. TA 78L005 AP			IC TA 78L005 AP
IC008	354339	IC MC 14175 BCP	4 FACH		IC MC 14175
IC009	333268	IC MC 14556 BCP	DUAL 1 TO 4		IC MC 14556
IC010	354350	IC ILD 1	2FACH		IC ILD 1
IC012	352106	IC ILQ 1	4FACH		IC ILQ 1

121665 NRS 90215 2CH PAG CONS				
Pos. Nr. Ref.	Best. Nr. Part			
No.	No.	Bezeichnung		Description
IC013	354340	IC SPNG.REGL. MC 79L15 ACP		IC MC 79L15 voltage reg.
IC014	331917	IC MC 74 HC 08 AN		IC MC 74 HC 08 N
IC015	331928	IC MC 74 HC595 AN		IC MC 74 HC595
IC016	352160	IC MC 74 HC589 N		IC MC 74 HC589
IC017	354175	IC SN 75176 BP	RS 485	IC SN 75176
IC018	354175	IC SN 75176 BP	RS 485	IC SN 75176
IC019	331921	IC MC 74 HC 02 N		IC MC 74 HC 02 N
00010	354660	TRANS RFD 15P05	P-CHANN	transistor RFD 15P05
Q0002	301184	TRANS BC 550 C		transistor BC 550 B
00010	354660	TRANS RFD 15P05	P-CHANN	transistor RFD 15P05
Q0004	301184	TRANS BC 550 C		transistor BC 550 B
Q0005	306928	TRANS BC 560 C		transistor BC 560 C
RN001	343457	DICKS-NETZW.	8PIN 2%	res.network 8x10k
RN002	343457	DICKS-NETZW.	8PIN 2%	res.network 8x10k
R0094	340643	WI-SI 1.00 OHM 0.35W 5%		safety resistor 1 Ohm
R0095	340299	WI-SI 2.20 OHM 0.30W 5%		safety resistor 2.20 Ohm
R0096	340299	WI-SI 2.20 OHM 0.30W 5%		safety resistor 2.20 Ohm

Ersatzteilliste - Bill of Materials

121666 NRS 90216 MIC/LINE+2AUX IN	
Pos. Nr.	Best. Nr.
Ref. No.	Part No. Bezeichnung Description

Verpackung	Packing material
------------	------------------

355511	KRT. NRS 90215 260X100X50	carton
347529	SCHUTZBEUTEL 127X305	poly bag

Mechanische Teile	Cabinet material
-------------------	------------------

355422	BLLENDE-BED NRS 90216	front panel
--------	-----------------------	-------------

813358 PCBSR#DPM4000	pcb assy 81335
----------------------	----------------

CN001	352158	MESSERLST. 32POL	connector male 32-pin
C0001	329021	KO-KER 0.10MF 100V 20%	cap ceramic 100nF
C0002	301522	KO-KER 22.0PF 500V 10%	cap ceramic 22pF
C0003	301522	KO-KER 22.0PF 500V 10%	cap ceramic 22pF
C0004	329021	KO-KER 0.10MF 100V 20%	cap ceramic 100nF
C0005	329021	KO-KER 0.10MF 100V 20%	cap ceramic 100nF
C0006	343531	KO-EL 47.000MF 63V	cap electrolytic 47uF/63V
C0007	343531	KO-EL 47.000MF 63V	cap electrolytic 47uF/63V
C0008	327815	KO-EL 22.000MF 25V	cap electrolytic 22uF/25V
C0009	327815	KO-EL 22.000MF 25V	cap electrolytic 22uF/25V
C0010	354031	KO-EL 470.000MF 10V	cap electrolytic 470uF/10V
C0011	329021	KO-KER 0.10MF 100V 20%	cap ceramic 100nF
C0012	301522	KO-KER 22.0PF 500V 10%	cap ceramic 22pF
C0013	327815	KO-EL 22.000MF 25V	cap electrolytic 22uF/25V
C0014	301543	KO-KER 330.0PF 500V 10%	cap ceramic 330pF
C0015	301543	KO-KER 330.0PF 500V 10%	cap ceramic 330pF
C0016	301524	KO-KER 47.0PF 500V 10%	cap ceramic 47pF
C0017	329021	KO-KER 0.10MF 100V 20%	cap ceramic 100nF
C0018	301524	KO-KER 47.0PF 500V 10%	cap ceramic 47pF
C0019	329021	KO-KER 0.10MF 100V 20%	cap ceramic 100nF
C0020	329021	KO-KER 0.10MF 100V 20%	cap ceramic 100nF
C0021	327815	KO-EL 22.000MF 25V	cap electrolytic 22uF/25V
C0022	327815	KO-EL 22.000MF 25V	cap electrolytic 22uF/25V
C0023	307445	KO-EL 10.000MF 35V	cap electrolytic 10uF/35V
C0024	340521	KO-EL 2.200MF 50V	cap electrolytic 2.2uF/50V
C0025	307445	KO-EL 10.000MF 35V	cap electrolytic 10uF/35V
C0026	307445	KO-EL 10.000MF 35V	cap electrolytic 10uF/35V
C0027	307445	KO-EL 10.000MF 35V	cap electrolytic 10uF/35V
C0028	307445	KO-EL 10.000MF 35V	cap electrolytic 10uF/35V
C0029	329021	KO-KER 0.10MF 100V 20%	cap ceramic 100nF
C0030	326922	KO-FOL 1000.000PF 100V 5%	cap mylar 1nF
C0031	343532	KO-EL 100.000MF 25V	cap electrolytic 100uF/25V
C0032	343532	KO-EL 100.000MF 25V	cap electrolytic 100uF/25V
C0033	340522	KO-EL 10.000MF 35V	cap electrolytic 10uF/35
C0034	340522	KO-EL 10.000MF 35V	cap electrolytic 10uF/35
C0035	340522	KO-EL 10.000MF 35V	cap electrolytic 10uF/35
C0036	340522	KO-EL 10.000MF 35V	cap electrolytic 10uF/35
C0037	301530	KO-KER 100.0PF 500V 10%	cap ceramic 100pF

121666 NRS 90216 MIC/LINE+2AUX IN					
Pos. Nr. Ref. No.	Best. Nr. Part No.	Bezeichnung			Description
C0038	301530	KO-KER	100.0PF	500V 10%	cap ceramic 100pF
C0039	301538	KO-KER	220.0PF K	500V 10%	cap ceramic 220pF
C0040	301538	KO-KER	220.0PF K	500V 10%	cap ceramic 220pF
C0041	327393	KO-FOL	4700.000PF	63V 5%	cap mylar 4700pF
C0042	327393	KO-FOL	4700.000PF	63V 5%	cap mylar 4700pF
C0043	327393	KO-FOL	4700.000PF	63V 5%	cap mylar 4700pF
C0044	327393	KO-FOL	4700.000PF	63V 5%	cap mylar 4700pF
C0045	340524	KO-EL	100.000MF	16V	cap electrolytic 100uF/16V
C0046	329021	KO-KER	0.10MF	100V 20%	cap ceramic 100nF
C0047	340522	KO-EL	10.000MF	35V	cap electrolytic 10uF/35
C0048	329021	KO-KER	0.10MF	100V 20%	cap ceramic 100nF
C0049	340522	KO-EL	10.000MF	35V	cap electrolytic 10uF/35
C0050	340522	KO-EL	10.000MF	35V	cap electrolytic 10uF/35
C0051	329021	KO-KER	0.10MF	100V 20%	cap ceramic 100nF
C0052	329021	KO-KER	0.10MF	100V 20%	cap ceramic 100nF
C0053	329021	KO-KER	0.10MF	100V 20%	cap ceramic 100nF
C0054	340522	KO-EL	10.000MF	35V	cap electrolytic 10uF/35
C0055	329021	KO-KER	0.10MF	100V 20%	cap ceramic 100nF
C0056	329021	KO-KER	0.10MF	100V 20%	cap ceramic 100nF
C0057	301478	KO-EL	22.000MF	63V	cap electrolytic 22uF/63V
C0058	351994	KO-KER	120.0PF	500V 2%	cap ceramic 120pF
C0059	301478	KO-EL	22.000MF	63V	cap electrolytic 22uF/63V
C0060	329021	KO-KER	0.10MF	100V 20%	cap ceramic 100nF
C0061	329021	KO-KER	0.10MF	100V 20%	cap ceramic 100nF
C0062	301478	KO-EL	22.000MF	63V	cap electrolytic 22uF/63V
D0001	301254	DIODE 1N 4148		AXIAL	diode 1N 4148
D0002	301254	DIODE 1N 4148		AXIAL	diode 1N 4148
D0003	301297	DIODE BAT 85			diode BAT 85
D0004	301297	DIODE BAT 85			diode BAT 85
D0005	301297	DIODE BAT 85			diode BAT 85
D0006	301297	DIODE BAT 85			diode BAT 85
FL001	346765	KO-SO MTB 271 KB		FILTER	safety component
FL002	346765	KO-SO MTB 271 KB		FILTER	safety component
FL003	346765	KO-SO MTB 271 KB		FILTER	safety component
FL004	346765	KO-SO MTB 271 KB		FILTER	safety component
FL005	343489	KO-SO MTY 223 NB		FILTER	safety component
IC001	327197	IC NE 5532 P	2FACH	OP	IC NE 5532 N
IC002	331332	IC DG 211 CJ			IC DG 211 CJ
IC003	327197	IC NE 5532 P	2FACH	OP	IC NE 5532 N
IC004	327197	IC NE 5532 P	2FACH	OP	IC NE 5532 N
IC006	331332	IC DG 211 CJ			IC DG 211 CJ
IC008	354417	IC SPNG.REG. TA 78L005 AP			IC TA 78L005 AP
IC009	331928	IC MC 74 HC595 AN			IC MC 74 HC595
IC011	352160	IC MC 74 HC589 N			IC MC 74 HC589
IC012	331921	IC MC 74 HC 02 N			IC MC 74 HC 02 N
IC013	331917	IC MC 74 HC 08 AN			IC MC 74 HC 08 N
JP001	340681	STIFTLEISTE 2X 3POL			connector male 2x3-pin
JP002	327779	STIFTLEISTE 3POL STL 11 S			connector male 3-pin
JS001	354303	BUCHSE-CINCH 4X CINCH			connector cinch 4x
JS002	354555	BUCHSE-FL. XLR 3POL			xlr connector female 3-pole
Q0001	301184	TRANS BC 550 C			transistor BC 550 B
Q0002	301184	TRANS BC 550 C			transistor BC 550 B

121666 NRS 90216 MIC/LINE+2AUX IN				
Pos. Nr.	Best. Nr.			
Ref. No.	Part No.	Bezeichnung	Description	
Q0003	343536	TRANS 2SA 1084 E TO 92	transistor 2SA 1084 E	
Q0004	343536	TRANS 2SA 1084 E TO 92	transistor 2SA 1084 E	
R0079	340299	WI-SI 2.20 OHM 0.30W 5%	safety resistor 2.20 Ohm	
R0080	340299	WI-SI 2.20 OHM 0.30W 5%	safety resistor 2.20 Ohm	
R0081	340299	WI-SI 2.20 OHM 0.30W 5%	safety resistor 2.20 Ohm	
S0001	354331	SCHALTER-SCHIEBE 2XUM	switch slide 2pdt	
VR001	354389	P-DREH 5KOHM LOG NEG KX	pot 5k log neg	
VR002	338893	WI-TRI 100.00 KOHM LIN	trim. pot. 100k lin	
VR003	338893	WI-TRI 100.00 KOHM LIN	trim. pot. 100k lin	
00010	332452	KODIERBRÜCKE 330.0101 SW	shorting plug	

Ersatzteilliste - Bill of Materials

121667 NRS 90217 2CH MIC/LINE IN			
Pos. Nr.	Best. Nr.		
Ref. No.	Part No.	Bezeichnung	Description

Verpackung			Packing material
------------	--	--	------------------

355511	KRT. NRS 90215	260X100X50	carton
347529	SCHUTZBEUTEL	127X305	poly bag

Mechanische Teile			Cabinet material
-------------------	--	--	------------------

355423	BLEND.NR90217	BED	front panel
--------	---------------	-----	-------------

813378 PCBAR.NR90217			pcb assy 81337
----------------------	--	--	----------------

CN001	352158	MESSERLST. 32POL	connector male 32-pin
C0001	343531	KO-EL 47.000MF 63V	cap electrolytic 47uF/63V
C0002	354031	KO-EL 470.000MF 10V	cap electrolytic 470uF/10V
C0003	329021	KO-KER 0.10MF 100V 20%	cap ceramic 100nF
C0004	343531	KO-EL 47.000MF 63V	cap electrolytic 47uF/63V
C0005	343531	KO-EL 47.000MF 63V	cap electrolytic 47uF/63V
C0006	343531	KO-EL 47.000MF 63V	cap electrolytic 47uF/63V
C0007	354031	KO-EL 470.000MF 10V	cap electrolytic 470uF/10V
C0008	301543	KO-KER 330.0PF 500V 10%	cap ceramic 330pF
C0009	301522	KO-KER 22.0PF 500V 10%	cap ceramic 22pF
C0010	327815	KO-EL 22.000MF 25V	cap electrolytic 22uF/25V
C0011	327815	KO-EL 22.000MF 25V	cap electrolytic 22uF/25V
C0012	301543	KO-KER 330.0PF 500V 10%	cap ceramic 330pF
C0013	301543	KO-KER 330.0PF 500V 10%	cap ceramic 330pF
C0014	301543	KO-KER 330.0PF 500V 10%	cap ceramic 330pF
C0015	301522	KO-KER 22.0PF 500V 10%	cap ceramic 22pF
C0016	329021	KO-KER 0.10MF 100V 20%	cap ceramic 100nF
C0017	329021	KO-KER 0.10MF 100V 20%	cap ceramic 100nF
C0018	327815	KO-EL 22.000MF 25V	cap electrolytic 22uF/25V
C0019	327815	KO-EL 22.000MF 25V	cap electrolytic 22uF/25V
C0020	301524	KO-KER 47.0PF 500V 10%	cap ceramic 47pF
C0021	326922	KO-FOL 1000.000PF 100V 5%	cap mylar 1nF
C0022	340521	KO-EL 2.200MF 50V	cap electrolytic 2.2uF/50V
C0023	307445	KO-EL 10.000MF 35V	cap electrolytic 10uF/35V
C0024	329021	KO-KER 0.10MF 100V 20%	cap ceramic 100nF
C0025	329021	KO-KER 0.10MF 100V 20%	cap ceramic 100nF
C0026	301524	KO-KER 47.0PF 500V 10%	cap ceramic 47pF
C0027	329021	KO-KER 0.10MF 100V 20%	cap ceramic 100nF
C0028	340521	KO-EL 2.200MF 50V	cap electrolytic 2.2uF/50V
C0029	329021	KO-KER 0.10MF 100V 20%	cap ceramic 100nF
C0030	326922	KO-FOL 1000.000PF 100V 5%	cap mylar 1nF
C0031	329021	KO-KER 0.10MF 100V 20%	cap ceramic 100nF
C0032	307445	KO-EL 10.000MF 35V	cap electrolytic 10uF/35V
C0033	343532	KO-EL 100.000MF 25V	cap electrolytic 100uF/25V
C0034	343532	KO-EL 100.000MF 25V	cap electrolytic 100uF/25V
C0035	307445	KO-EL 10.000MF 35V	cap electrolytic 10uF/35V
C0036	307445	KO-EL 10.000MF 35V	cap electrolytic 10uF/35V
C0037	329021	KO-KER 0.10MF 100V 20%	cap ceramic 100nF

121667 NRS 90217 2CH MIC/LINE IN					
Pos. Nr. Ref. No.	Best. Nr. Part No.	Bezeichnung			Description
C0038	340522	KO-EL	10.000MF	35V	cap electrolytic 10uF/35
C0039	340522	KO-EL	10.000MF	35V	cap electrolytic 10uF/35
C0040	340522	KO-EL	10.000MF	35V	cap electrolytic 10uF/35
C0041	340522	KO-EL	10.000MF	35V	cap electrolytic 10uF/35
C0042	301530	KO-KER	100.0PF	500V 10%	cap ceramic 100pF
C0043	301530	KO-KER	100.0PF	500V 10%	cap ceramic 100pF
C0044	307445	KO-EL	10.000MF	35V	cap electrolytic 10uF/35V
C0045	301538	KO-KER	220.0PF	K 500V 10%	cap ceramic 220pF
C0046	301538	KO-KER	220.0PF	K 500V 10%	cap ceramic 220pF
C0047	307445	KO-EL	10.000MF	35V	cap electrolytic 10uF/35V
C0048	327393	KO-FOL	4700.000PF	63V 5%	cap mylar 4700pF
C0049	327393	KO-FOL	4700.000PF	63V 5%	cap mylar 4700pF
C0050	327393	KO-FOL	4700.000PF	63V 5%	cap mylar 4700pF
C0051	327393	KO-FOL	4700.000PF	63V 5%	cap mylar 4700pF
C0052	340524	KO-EL	100.000MF	16V	cap electrolytic 100uF/16V
C0053	329021	KO-KER	0.10MF	100V 20%	cap ceramic 100nF
C0054	329021	KO-KER	0.10MF	100V 20%	cap ceramic 100nF
C0055	329021	KO-KER	0.10MF	100V 20%	cap ceramic 100nF
C0056	340522	KO-EL	10.000MF	35V	cap electrolytic 10uF/35
C0057	329021	KO-KER	0.10MF	100V 20%	cap ceramic 100nF
C0058	340522	KO-EL	10.000MF	35V	cap electrolytic 10uF/35
C0059	340522	KO-EL	10.000MF	35V	cap electrolytic 10uF/35
C0060	329021	KO-KER	0.10MF	100V 20%	cap ceramic 100nF
C0061	329021	KO-KER	0.10MF	100V 20%	cap ceramic 100nF
C0062	340522	KO-EL	10.000MF	35V	cap electrolytic 10uF/35
C0063	329021	KO-KER	0.10MF	100V 20%	cap ceramic 100nF
C0064	301478	KO-EL	22.000MF	63V	cap electrolytic 22uF/63V
C0065	329021	KO-KER	0.10MF	100V 20%	cap ceramic 100nF
C0066	301478	KO-EL	22.000MF	63V	cap electrolytic 22uF/63V
C0067	351994	KO-KER	120.0PF	500V 2%	cap ceramic 120pF
C0068	301478	KO-EL	22.000MF	63V	cap electrolytic 22uF/63V
C0069	329021	KO-KER	0.10MF	100V 20%	cap ceramic 100nF
D0001	301254	DIODE 1N 4148	AXIAL		diode 1N 4148
D0002	301254	DIODE 1N 4148	AXIAL		diode 1N 4148
D0003	301254	DIODE 1N 4148	AXIAL		diode 1N 4148
D0004	301254	DIODE 1N 4148	AXIAL		diode 1N 4148
D0005	301297	DIODE BAT 85			diode BAT 85
D0006	301297	DIODE BAT 85			diode BAT 85
D0007	301297	DIODE BAT 85			diode BAT 85
D0008	301297	DIODE BAT 85			diode BAT 85
FL001	346765	KO-SO MTB 271 KB	FILTER		safety component
FL002	346765	KO-SO MTB 271 KB	FILTER		safety component
FL003	346765	KO-SO MTB 271 KB	FILTER		safety component
FL004	346765	KO-SO MTB 271 KB	FILTER		safety component
FL005	343489	KO-SO MTY 223 NB	FILTER		safety component
IC003	327197	IC NE 5532 P	2FACH OP		IC NE 5532 N
IC004	327197	IC NE 5532 P	2FACH OP		IC NE 5532 N
IC007	331332	IC DG 211 CJ			IC DG 211 CJ
IC009	331928	IC MC 74 HC595 AN			IC MC 74 HC595
IC010	352160	IC MC 74 HC589 N			IC MC 74 HC589
IC011	354417	IC SPNG.REGL. TA 78L005 AP			IC TA 78L005 AP
IC013	331921	IC MC 74 HC 02 N			IC MC 74 HC 02 N

121667 NRS 90217 2CH MIC/LINE IN			
Pos. Nr. Ref. No.	Best. Nr. Part No.	Bezeichnung	Description
IC014	331917	IC MC 74 HC 08 AN	IC MC 74 HC 08 N
JP001	340681	STIFTFLEISTE 2X 3POL	connector male 2x3-pin
JP002	340681	STIFTFLEISTE 2X 3POL	connector male 2x3-pin
JP003	327779	STIFTFLEISTE 3POL STL 11 S	connector male 3-pin
JP004	327779	STIFTFLEISTE 3POL STL 11 S	connector male 3-pin
JS001	354555	BUCHSE-FL. XLR 3POL	xlr connector female 3-pole
JS002	354555	BUCHSE-FL. XLR 3POL	xlr connector female 3-pole
Q0001	343536	TRANS 2SA 1084 E TO 92	transistor 2SA 1084 E
Q0002	343536	TRANS 2SA 1084 E TO 92	transistor 2SA 1084 E
Q0003	343536	TRANS 2SA 1084 E TO 92	transistor 2SA 1084 E
Q0004	343536	TRANS 2SA 1084 E TO 92	transistor 2SA 1084 E
Q0005	301184	TRANS BC 550 C	transistor BC 550 B
Q0006	301184	TRANS BC 550 C	transistor BC 550 B
Q0007	301184	TRANS BC 550 C	transistor BC 550 B
Q0008	301184	TRANS BC 550 C	transistor BC 550 B
R0097	340299	WI-SI 2.20 OHM 0.30W 5%	safety resistor 2.20 Ohm
R0098	340299	WI-SI 2.20 OHM 0.30W 5%	safety resistor 2.20 Ohm
R0099	340299	WI-SI 2.20 OHM 0.30W 5%	safety resistor 2.20 Ohm
S0001	354331	SCHALTER-SCHIEBE 2XUM	switch slide 2pdt
S0002	354331	SCHALTER-SCHIEBE 2XUM	switch slide 2pdt
T0001	340955	ÜBERTRAGER 1: 1 BV310001061	transformer audio
T0002	340955	ÜBERTRAGER 1: 1 BV310001061	transformer audio
VR001	354389	P-DREH 5KOHM LOG NEG KX	pot 5k log neg
VR002	354389	P-DREH 5KOHM LOG NEG KX	pot 5k log neg
00010	332452	KODIERBRÜCKE 330.0101 SW	shorting plug

MEMO